



2027 Comprehensive Land Use Plan

Grays Harbor County

SEPA DRAFT Environmental Impact Statement

May 2026





2027 Comprehensive Land Use Plan

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May 8, 2026

To: Reviewing Agencies, Tribes, and Interested Parties

**RE: Grays Harbor County 2027 Comprehensive Land Use Plan –
Draft Environmental Impact Statement**

Grays Harbor County is issuing this Draft Environmental Impact Statement (Draft EIS) pursuant to the Washington State Environmental Policy Act (SEPA) to inform agency decision making on the proposed adoption of the 2027 Comprehensive Land Use Plan for unincorporated Grays Harbor County. This cover letter is provided consistent with WAC 197-11-435 and is not part of the Draft EIS for purposes of EIS adequacy.

The proposed Land Use Plan is a non-project (programmatic) action intended to provide long-range land use policy guidance that may inform housing, transportation, public services, environmental protection, and economic development through the year 2037. Because adoption of the action may result in probable significant adverse environmental impacts, Grays Harbor County is preparing an Environmental Impact Statement under SEPA.

The purpose of the Draft EIS is to provide environmental information to decision makers and the public to support future County decisions regarding adoption, modification, or denial of the proposed Land Use Plan. The County has not identified a preferred alternative. Consistent with SEPA, a final decision may combine elements of the alternatives evaluated in the Draft EIS, provided that resulting impacts are within the range of impacts analyzed.

The Draft EIS evaluates a No Action Alternative and two action alternatives that differ primarily in the amount of population growth and development intensity accommodated within unincorporated areas of the County. The Draft EIS also identifies key environmental issues, potential mitigation measures, and options for decision makers regarding the location and distribution of growth, infrastructure needs, and environmental protection.

The Draft EIS is issued for public, agency, and tribal review and comment. Grays Harbor County invites comments on the Draft EIS during the 30-day comment period beginning on Thursday, May 14, 2026 and will close at 4:30 p.m. on Monday, June 15, 2026.

Written comments must be received by the close of the comment period and may be submitted to:

Grays Harbor County Planning and Building Division

Attention: Kaydee Mittleider

100 West Broadway, #31

Montesano, WA 98563

360-249-5579

Send online comments to: info@graysharbor2027compplan.com

The Draft EIS is available for public review online at: <https://graysharbor2027compplan.com/>

Sincerely,

A handwritten signature in blue ink, appearing to read 'Suresh Bhagavan', is written above the printed name.

Suresh Bhagavan, Director

Planning & Building, Grays Harbor County

SEPA Responsible Official

SEPA Fact Sheet

Grays Harbor County 2027 Comprehensive Land Use Plan Draft Environmental Impact Statement

Project Title: Grays Harbor County 2027 Comprehensive Land Use Plan

Location of Proposal: Unincorporated Grays Harbor County, Washington

Lead Agency: Grays Harbor County
Department of Public Services – Planning & Building Division
100 W. Broadway Avenue, Suite 31
Montesano, WA 98563

Proponent: Grays Harbor County

Proposed Action

Grays Harbor County proposes adoption of the 2027 Comprehensive Land Use Plan for unincorporated areas of the county, along with related updates to development regulations. The proposed Land Use Plan is a non-project (programmatic) action providing long-range policy guidance for land use, housing, transportation, public services, environmental protection, and economic development through the year 2037.

Environmental Review

Because adoption of the proposed Land Use Plan may result in probable significant adverse environmental impacts, Grays Harbor County is preparing an Environmental Impact Statement (EIS) under the Washington State Environmental Policy Act (SEPA).

Alternatives

The Draft EIS evaluates three alternatives based on the Washington State Office of Financial Management 2024 population estimate for Grays Harbor County as a baseline: (1) No Action Alternative (approximately 81,270 population); (2) Moderate Growth Alternative (approximately 85,140 population); and (3) High Growth Alternative (approximately 89,010 population). A preferred alternative has not yet been selected.

Required Approvals

The proposed action is a non-project (programmatic) Land Use Plan update. Implementation of the proposal would require legislative approvals, rather than project-specific permits.

Known approvals required include the following:

- Adoption of the 2027 Comprehensive Land Use Plan by the Grays Harbor County Board of County Commissioners
- Adoption of associated amendments to development regulations and zoning, as necessary to implement the Land Use Plan

Adoption of the proposed Land Use Plan does not authorize site-specific development. Future development projects that may occur as a result of the adopted Land Use Plan would require separate project-level permits and approvals, which may include land use permits, construction permits, and other local, state, or federal authorizations, as applicable.

Project-specific permits and authorizations would be evaluated, if applicable, at the project level, not as part of Land Use Plan adoption.

Permits and Approvals

No project-specific permits are required for adoption of the Land Use Plan. Project-level permits would be required for future development and evaluated separately.

Public Comment

This Draft EIS is issued with a 30-day public comment period. Review materials are available online at <https://graysharbor2027compplan.com/> and at designated public locations, including the Grays Harbor County Department of Public Services, Planning and Building Division.

Designated SEPA Responsible Official:

Suresh Bhagavan, Director
Planning & Building Division
Grays Harbor County

Contact Person: Kaydee Mittleider, Grays Harbor County Planning and Building Division

Tentative Date of Implementation: 2027

Final EIS Anticipated: Summer 2026

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Acronyms and Abbreviations

Acronym	Definition
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
BMP	best management practice
BOCC	Board of County Commissioners
BPA	Bonneville Power Administration
CARA	Critical Aquifer Recharge Area
CFR	<i>Code of Federal Regulations</i>
County	Grays Harbor County
DNR	Washington State Department of Natural Resources
DOH	Washington State Department of Health
DU	dwelling unit
Ecology	Washington State Department of Ecology
EFH	essential fish habitat
EIS	Environmental Impact Statement
EMS	emergency medical services
EPA	U.S. Environmental Protection Agency
ERU	equivalent residential unit
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FTE	full-time equivalent
FWHCA	Fish and Wildlife Habitat Conservation Area
GHCC	Grays Harbor County Code
GHCOG	Grays Harbor Council of Governments
GHG	greenhouse gas
GHT	Grays Harbor Transit
GHTA	Grays Harbor Transportation Authority
GIS	geographic information system
GMA	Growth Management Act
HAI	Housing Affordability Index

Acronym	Definition
HAMFI	household area median family income
HPA	Hydraulic Project Approval
HRS	Highway of Regional Significance
HSS	Highway of Statewide Significance
HUD	U.S. Department of Housing and Urban Development
ITE	Institute of Transportation Engineers
IV	independent variable
LOS	level-of-service
NAAQS	National Ambient Air Quality Standards
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OFM	Office of Financial Management
ORCAA	Olympic Region Clean Air Agency
ORV	off-road vehicle
OSS	onsite sewage system
PM _{2.5}	particulate matter less than 2.5 micrometers in aerodynamic diameter
PUD	Public Utility District
RCW	Revised Code of Washington
RFA	regional fire authority
ROW	right-of-way
RTPO	regional transportation planning organization
SEPA	State Environmental Policy Act
SFHA	Special Flood Hazard Area
SMP	Shoreline Master Program
SR	State Route
SWAP	Source Water Assessment Program
SWMMWW	Stormwater Management Manual for Western Washington
SWRTPO	Southwest Washington Regional Transportation Planning Organization
TDM	Travel Demand Management
TDP	Transit Development Plan
TIP	transportation improvement program

Acronym	Definition
TMDL	total maximum daily load
UPWP	Unified Planning Work Program
US 12	US Route 12
US 101	US Route 101
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
WAC	Washington Administrative Code
WCRER	Washington Center for Real Estate Research
WDFW	Washington Department of Fish and Wildlife
WHPA	Wellhead Protection Area
WISAARD	Washington Information System for Architectural and Archaeological Records Data
WNHP	Washington Natural Heritage Program
WRIA	Water Resource Inventory Area
WSDOT	Washington State Department of Transportation

1. Summary

Grays Harbor County (County) is proposing to adopt a new 2027 Comprehensive Land Use Plan for unincorporated areas of the county, along with related updates to development regulations. The proposed Comprehensive Land Use Plan is a non-project (programmatic) action intended to provide long-range policy guidance for land use, housing, transportation, public services, environmental protection, and economic development through the year 2037. The plan will guide future zoning, permitting, and capital planning decisions. Because adoption of the plan may result in probable significant adverse environmental impacts over time, the County is preparing an Environmental Impact Statement (EIS) under the Washington State Environmental Policy Act (SEPA).

1.1 Purpose of the Proposed Action

The purpose of the 2027 Comprehensive Land Use Plan is to provide long-range guidance for land use, environmental protection, and community development, forming the policy foundation for zoning and other development regulations in the unincorporated county. The proposed action will adopt a new 2027 Comprehensive Land Use Plan and updates to zoning and development regulations. It will include a community vision and establish a framework of goals and policies for future growth and development in unincorporated areas of the county.

1.1.1 Proposal Objectives

As part of describing proposed actions and alternatives, SEPA requires a description of proposal objectives and features in the Draft EIS. Agencies are encouraged to describe a proposal in terms of objectives, particularly for agency actions to allow for consideration of a wider range of alternatives and measurement of the alternatives alongside the objectives.

The objectives of the proposed action are as follows:

- Establish a community vision for how land use and development should occur in the unincorporated county, ensuring the plan reflects local values, needs, and long-term goals.
- Create a new comprehensive land use plan (including updated goals, policies, and a parcel-based land use map) built on community input and aligned with related plans such as the Critical Areas Protection Ordinance (GHCC 18.06) and Shoreline Master Program (SMP).
- Update development regulations to ensure consistency with the new plan, improve usability, and address today's issues, trends, technologies, and growth patterns.
- Guide future growth and development in a way that preserves rural character, protects natural resources, and supports economic opportunity, jobs, services, and housing needs.
- Provide a framework for long-range decision-making on transportation, utilities, housing, resource lands, and public services to ensure coordinated, predictable, and sustainable development.
- Engage the community throughout the planning process so the final plan is transparent, accessible, and informed by broad public participation.
- Evaluate environmental impacts through an EIS, consistent with SEPA requirements.

1.2 Alternatives Analyzed in the Draft EIS

SEPA requires consideration of a sufficiently wide range of alternatives to achieve the objectives. Three alternatives are studied in the Draft EIS, which are based on the Washington State Office of Financial Management (OFM) 2024 population estimate for the county as the baseline. A preferred alternative will be identified following public review and comment and addressed in the Final EIS.

- **Alternative 1** – The No Action Alternative plans for a population of approximately 81,270, about a 5% increase over the 2024 OFM estimate, and retains land use patterns generally consistent with existing development, with only limited updates for consistency with the community vision and partially planning Growth Management Act (GMA) requirements. New Residential is assumed to accommodate the level of projected population. Retail Commercial growth of 300,000 square feet and Industrial growth of 1,000,000 square feet are assumed.
- **Alternative 2** – The Moderate Growth Alternative plans for a population of approximately 85,140, reflecting a 10% increase over 2024, and maintains the same land use patterns as No Action but includes additional Residential growth to accommodate the higher level of projected population growth. Retail Commercial and Industrial growth is the same as Alternative 1.
- **Alternative 3** – The High Growth Alternative plans for a population of approximately 89,010, reflecting a 15% increase over 2024, and generally maintains the same land use pattern as No Action but includes additional Residential growth to accommodate the higher level of projected population growth. Retail Commercial and Industrial growth is the same as Alternative 1.

1.3 Summary of Impacts and Mitigation

Under SEPA, agencies evaluate a proposal's probable significant adverse environmental impacts, including reasonably foreseeable direct, indirect, and cumulative effects. An EIS must summarize significant impacts, identify significant unavoidable adverse impacts, compare reasonable alternatives, and describe mitigation measures to address environmental harm. Table 1-1 provides a high-level summary of impacts and corresponding mitigation across the analyzed alternatives that are further detailed in Chapter 3, Environmental Consequences.

Table 1-1. Summary of Impacts and Mitigation by Alternative

Resources	Element of Analysis	Alternative 1: No Action	Alternative 2: Moderate Growth	Alternative 3: High Growth
Earth Resources	Impacts Common to All Alternatives	Under all alternatives: - Seismic shaking would affect all regions, with risk varying by topography, geology, and soils. - Structures near steep slopes, unstable or noncohesive soils and geologic units, fault lines, burned areas, and streams or rivers are at greater general risk during a seismic event. - Developments lacking proper seismic design precautions may also be at greater risk during seismic events. - There is a relatively low potential for mineral resource land conflicts overall. - Only Area H has more than a low potential for conflicts with mineral resources. Other areas lack active surface mines or mapped mining districts.		
	Landslide Hazards	- Areas E, H, and I have historical landslide activity. - Areas F, G, and J include areas with potential landslide risks near steep slopes or fluvial waterbodies.	Potential for adverse impacts generally increase with development intensity.	Potential for adverse impacts generally increase with development intensity.
	Erosion Hazards	- Areas A, B, C, and D (coastal development) have pockets of severe hazard parallel to the coastline and State Route 105. - Areas E and F are comprised of greater than 10% severe soil hazards. - Area G is comprised of less than 10% severe soil hazards. - Areas H and I have moderate and high hazards present along the rolling hills. No hazards are generally associated with the larger river and stream valleys. - Area J has largely moderate hazard, with less than 10% severe hazard.	Potential for adverse impacts generally increase with development intensity, particularly in those regions of medium to high erosion potential.	Potential for adverse impacts generally increase with development intensity, particularly in those regions of medium to high erosion potential.
	Seismic Hazards	- All areas except Area J have National Earthquake Hazards Reduction Program seismic site class ratings of D or D-E. - All areas except Area J have some liquefaction susceptibility. - Areas A and B have active faults that could pose a risk to developments. - There is moderate to high liquefaction susceptibility associated with coastal or fluvial waterbodies.	All areas except Area J have a potential for adverse effects due to seismic hazards that increase with increasing development.	All areas except Area J have a potential for adverse effects due to seismic hazards that increase with increasing development.
	Tsunami Hazard Areas	- Tsunamis are primarily a coastal threat, but can also travel up river valleys in low-lying areas. - All areas except Areas H, J, and G are located within tsunami hazard areas. - Areas A, E, I, and F have some degree of coastal or fluvial proximity and have moderate potential for adverse impacts due to tsunami hazard. - Areas B, C, and D are nearly entirely within tsunami hazard areas and have high potential for adverse impacts.	All areas except Areas H, J, and G are associated with a growing magnitude of impact of tsunami hazards with increased development.	All areas except Areas H, J, and G are associated with a growing magnitude of impact of tsunami hazards with increased development.
	Resource Lands and Mining Impacts	Potential for conflicts with mineral resource areas or surface mining operations would be low.	Potential conflicts may occur where mineral resources associated with permitted mining sites extend into adjacent planning areas.	- Potential for resource-use conflict and direct development hazards increases as development encroaches on these areas due to higher growth levels. - Area H, with multiple active surface mines, may experience a moderate increase in conflict potential.

Resources	Element of Analysis	Alternative 1: No Action	Alternative 2: Moderate Growth	Alternative 3: High Growth
	Potential Mitigation Measures	In addition to incorporated plan features and applicable regulations and commitments, other potential mitigation measures include: ▪ Update GHCC 18.06 to help limit development in hazardous or sensitive areas. ▪ Seismic and tsunami hazards require avoiding high-risk areas or using hazard-resistant design. ▪ Tsunami warning systems, evacuation routes, signage, and engineered refuge structures could provide protection.		
Air Quality and Greenhouse Gases	Impacts Common to all Alternatives	Under all alternatives, impacts to air quality and/or greenhouse gases could result in growth that is as follows: ▪ Remains constant for level/type of development at Area J (Satsop Development Park), regardless of the growth scenario. ▪ Increases air pollutant emissions by adding traffic, construction activity, and energy use, leading to greater potential for air quality degradation under higher-growth scenarios. ▪ Increases greenhouse gas emissions from transportation, construction, and energy use, which contributes to climate-related vulnerabilities.		
	Changes in Emissions	▪ Lowest potential for adverse effects on air quality and climate change resiliency are due to the lowest scale of development. ▪ Traffic volumes typically rise with growth in development, leading to higher vehicular emissions of pollutants such as nitrogen oxides, carbon monoxide, and particulate matter. ▪ Regional vehicle miles traveled increases. ▪ Air pollutant emissions generated are expected to rise with the expansion of commercial and industrial development. ▪ Fugitive dust and tail pipe emission related to grading and construction could temporarily degrade air quality.	▪ With increase in development, the number and intensity of activities that produce air pollutants also increases.	▪ With increase in development, the number and intensity of activities that produce air pollutants also increases.
	Operational Emissions From Heating and Industrial Activity	▪ Emissions would be generated by combustion of natural gas, fuel oil, and propane combustion used for heating new and existing dwellings, retail, and commercial businesses. ▪ Potential for air quality impacts from burning wood if Residential development includes fireplaces and woodstoves.	▪ With increasing development, the operational emissions from heating and industrial activity also increases.	▪ With increasing development, the operational emissions from heating and industrial activity also increases.
	Climate Resiliency	▪ Development in low-lying or shore-adjacent communities, coastal erosion, and flooding heightens the risk of exposure to storm surge, shoreline retreat, and extreme weather events. ▪ Areas A, B, and C are more susceptible to coastal erosion and flooding due to their proximity to the shoreline, and future development in these locations.	▪ Higher growth scenarios increase emissions but also intensify the physical and social risks associated with climate change impacts.	▪ Higher growth scenarios increase emissions but also intensify the physical and social risks associated with climate change impacts.
	Potential Mitigation Measures	In addition to incorporated plan features and applicable regulations and commitments, other potential mitigation measures include: ▪ Policies and regulations could require construction contractors to implement air-quality control plans ▪ Policies could encourage climate-resilient design to reduce long-term vulnerability.		
Water Resources	Impacts Common to All Alternatives	Under all alternatives, impacts to water resources could result in the following: ▪ Impervious surfaces increase with development, reducing infiltration and groundwater recharge potentially impacting drinking water supply. ▪ Stormwater runoff carrying pollutants increases impacting water quality of both surface and groundwater. ▪ Stormwater peak flows and volume increases may impact existing stormwater systems requiring retrofits or added infrastructure. ▪ Surface waters and wetlands are impacted either directly by construction activities such as grading and building; or indirectly by changing hydrology with increase impervious surfaces, stormwater discharges, and increased pollutant loads. ▪ Development in all growth areas except Area J include Federal Emergency Management Agency designated floodplain (Zone A) and may impact flood storage and face elevated infrastructure risk. Coastal growth areas (Areas A, B, C, and D) also include high risk coastal flood zones that pose similar risks. ▪ Increasing development will result in additional demand for drinking water impacting both surface and groundwater supplies.		

Resources	Element of Analysis	Alternative 1: No Action	Alternative 2: Moderate Growth	Alternative 3: High Growth
	Groundwater/ Drinking Water Supply	Low potential for adverse effects, with localized risks where impervious surfaces increase without added controls.	Moderate potential for adverse effects from increased demand, reduced recharge, and greater contamination potential without effective stormwater controls.	Moderate to severe potential for adverse effects due to highest demand, recharge reduction, and contaminant loading risk if stormwater is not effectively managed.
	Rivers/Streams/Wat erbodies	Moderate potential for adverse effects where development proceeds under existing conditions (for example, localized buffer encroachments or unmanaged runoff).	Moderate to high potential for adverse effects from hydrologic alteration and pollutant loading, scaling with added impervious surface.	High potential for adverse effects; greatest hydrologic change and pollutant load increases without robust controls.
	Floodplains	Risks remain where development interfaces with mapped or unmapped flood hazards; site-specific considerations apply.	Increased exposure of new infrastructure to flood and channel migration risk unless avoided; potential encroachment on flood storage/adjustment areas.	Highest likelihood of infrastructure exposure and functional encroachment unless avoided; increased potential for long-term habitat/function degradation.
	Wetlands	Impacts are reduced but not eliminated; localized functions can still be affected by runoff and potential offsite mitigation.	Increased potential for local loss of function where mitigation is offsite.	Highest potential for localized function losses.
	Water Quality	Potential impacts track existing impairments; areas with listed waters have greater sensitivity.	Moderate potential basin-wide; higher in growth areas with impaired waters.	Moderate to high potential for adverse effects, especially in areas with existing impairments.
	Stormwater	Generally lower system demand than growth alternatives; retrofit needs are limited to existing constraints.	Increased flows and treatment needs; targeted retrofits/new facilities likely where systems are limited (notably in/near Area E).	Greatest increases in peak flows/volumes and treatment needs; Area E remains the most sensitive due to Lake Aberdeen drainage.
	Potential Mitigation Measures	The GMA required periodic update of the Critical Areas Protection Ordinance will increase wetland protections. In addition, optional mitigation measures could include the following: - Land use policies that focus growth into already developed areas, limiting new impacts. - Expanding use of the Ecology Stormwater Manual for Western Washington to more types of development. - Capital projects to evaluate and upgrade existing stormwater systems.		
Plants and Animals	Impacts Common to All Alternatives	All alternatives would result in some degree of ecological impacts that accompany development (such as, vegetation clearing, soil compaction, greater human disturbance, noise and lighting, and the introduction of impervious surfaces), with the potential to do the following: - Convert intact habitat into built environments. - Disrupt wildlife movement corridors and reduce connectivity. - Alter hydrologic processes and increase pollutant transport.		
	Fish and Aquatic Habitat	- Less new disturbance would occur in rural or intact aquatic habitats. - Impacts would remain localized within development centers. - Limited overall geographic spread of aquatic habitat degradation due to more concentrated growth patterns than Alternatives 2 and 3.	- Avoiding vulnerable hydrologic areas would lessen impacts in certain riparian and coastal habitats. - Inland watersheds would still face increased runoff and pollutant loading. - Fewer aquatic impacts than Alternative 3, but more than Alternative 1 due to less concentrated development.	- Dispersed development would produce widespread low to moderate intensity aquatic impacts across a broad geographic area. - Affect hydrologically sensitive areas with increasing frequency. - Increase cross-watershed cumulative degradation due to lack of development concentration. - Result in the broadest overall footprint of disturbance, with more widespread aquatic habitat effects than the other alternatives.
	Wildlife and Associated Habitat	- Concentrating growth within already disturbed areas would reduce fragmentation of intact wildlife habitats elsewhere in the county. - Habitat within development centers would still be affected, but impacts would be localized and more predictable. - County-wide habitat loss and new movement barriers would be reduced due to limited outward expansion. - Least wildlife habitat disturbance, with impacts largely contained in existing development centers.	- Avoiding vulnerable coastal and riparian areas would lessen habitat loss in particularly sensitive wildlife zones. - Inland and upland wildlife habitats would still experience fragmentation where development occurs. - Wildlife impacts would be more spatially focused and less widespread than under a dispersed growth pattern. - Less wildlife habitat fragmentation than Alternative 3, but more than Alternative 1, given that development would still expand into some semi-intact inland habitats.	- Greatest geographic extent of wildlife habitat loss and fragmentation, due to dispersed, unconcentrated growth. - Dispersed development would incrementally fragment upland forests, riparian corridors, and rural open spaces. - A broader range of wildlife species would be affected as intact or semi-undisturbed habitats would be more frequently subject to encroachment. - Wildlife movement corridors would experience greater interruption due to spread-out habitat conversion.

Resources	Element of Analysis	Alternative 1: No Action	Alternative 2: Moderate Growth	Alternative 3: High Growth
	Vegetation	- Concentrating new development in Mixed-Use and Urban Services areas would reduce clearing of intact vegetation elsewhere in the county. - Vegetation impacts would remain localized within existing developed or previously disturbed areas. - County-wide vegetation disturbance would decrease as outward expansion is limited. - Least vegetation loss and fragmentation, with impacts more contained and less widespread than under Alternatives 2 or 3.	- Vegetation removal would still occur where new development is allowed. - Redirecting growth away from sensitive vegetated areas would reduce clearing pressure in coastal or flood-prone vegetative communities. - Fragmentation and loss would persist in other buildable portions of the county, but with reduced severity compared to a dispersed pattern. - Less vegetation removal than Alternative 3, but more than Alternative 1, due to partially dispersed development and moderate expansion into undisturbed vegetated areas.	- Largest spatial extent of vegetation loss and fragmentation, with broader ecosystem level effects than Alternatives 1 or 2 based on this spatial extent. - Widespread, incremental clearing would remove native forest, shrub, and grassland communities across a broad geographic area. - Fragmentation of vegetation communities would increase, affecting a wider variety of habitat types. - Vegetation diversity and structural complexity would diminish as intact or semi-undisturbed areas would be more frequently disturbed.
	Potential Mitigation Measures	In addition to incorporated plan features and applicable regulations and commitments, other potential mitigation measures include the following: - Update policies, regulations, and technical guidance to incorporate current best available science and changes to state habitat, water quality, and critical areas requirements. - Expand use of the Ecology Stormwater Manual for Western Washington to more types of development. - Increase community education and outreach on the ecological value of native plants and their role in supporting habitat functions. - Adopt policies or regulations that require or encourage the following: - Native vegetation to be retained or enhanced, during development and redevelopment. - Protection of native soils and hydrologic processes using techniques such as vegetated buffers and habitat corridors. - Use of low-impact development practices to reduce impervious surface. - Prioritize mitigation and restoration of fragmented wildlife movement corridors to improve habitat connectivity outside of agricultural resource lands. - Develop a coordinated landowner stewardship program offering restoration guidance, native planting recommendations, long-term maintenance strategies, optional tools (easements, notices on title), and educational opportunities. - Support public acquisition and long-term protection of high-value habitats outside of agricultural resource lands. - Use programmatic or watershed-scale mitigation approaches when broader, planning-area-wide impacts are anticipated.		
Land Use and Shoreline Use	Impacts Common to All Alternatives	- Increased development and conversion of vacant or underutilized parcels to higher activity levels and increase the potential for incompatible land uses at the urban rural interface. - Changes to city, special district, and county water and sewer system plans serving unincorporated county areas. - Changes to the comprehensive plan and development regulations, including adoption of a new Comprehensive Land Use Plan, consolidation of existing plan designations based on the purpose and intent, and update zoning and development regulations.		
	Changes to Plans, Policies, and Zoning	Changes to land use designations and zoning within water and service areas of incorporated cities may require updates to their utility plans and policies.	Changes to land use designations and zoning within city water and service areas may require updates to City utility plans and policies.	- Changes to land use designations and zoning within city water and service areas may require updates to City plans and policies. - Development regulations may need to be amended to encourage more efficient use of land and higher densities in urban services areas, potentially including allowances for greater building heights, a wider variety of housing types, smaller lot sizes, and increased lot coverage.
	Conversion of Uses	Lot patterns would shift as development reaches adopted zoning maximums, reducing the supply of vacant land.	- Undeveloped land would increasingly be converted to housing. - Infill would occur increasingly where existing development is below allowed densities, resulting in higher densities or different housing types than currently present. - Shrinking supply of vacant lots and shifting lot patterns as development reaches adopted zoning maximums, reducing the amount of vacant, partially developed, and re-developable land.	- Insufficient land designated as Urban Services could lead to conversion of lower-density designations—such as Rural Residential or General Development—to Urban Services. - The supply of vacant lots would shrink, and development would increase on partially developed and re-developable properties.

Resources	Element of Analysis	Alternative 1: No Action	Alternative 2: Moderate Growth	Alternative 3: High Growth
	Change in Activity Levels and Patterns	Changes to land use intensity and activity patterns as new development occurs, most pronounced in areas designated as Mixed-Use and Urban Services.	Higher densities in Urban Services and Mixed-Use areas could increase ambient noise, traffic, and general activity associated with new housing and construction.	- Higher development densities and intensities in Urban Services areas may result in notable increases in ambient noise, traffic, and general activity. - Significant construction activity related to new roads and utilities may occur to support Commercial uses and higher density development in Urban Services and Mixed-Use areas. - Increased activity in rural areas on partially developed and re-developable properties as development occurs at higher densities than in the past.
	Land Use Compatibility	Localized incompatibilities as new development occurs or as existing areas redevelop at higher intensities.	Moderate potential increase in land use incompatibilities such as noise or odor from new Commercial or Industrial uses may occur where Urban Services and Mixed-Use areas interface with adjacent Rural Residential and General Development areas.	Highest potential increase in land use incompatibilities such as noise or odor associated with higher densities or new Commercial or Industrial uses may occur where Urban Services and Mixed-Use areas interface with Rural Residential and General Development areas.
	Mitigation Measures	In addition to incorporated plan features and applicable regulations and commitments, other potential mitigation measures include the following: - Land use policies can focus growth in areas with existing water and sewer capacity. - Impacts from incompatible uses could be mitigated by amending development regulations and zoning in GHCC 16, 17 and 18. Amendments could include new or additional development standards such as setbacks, landscaping, or changes to allowable uses.		
Population Housing and Employment	Impacts Common to all alternatives	County-wide population and housing will increase in all jurisdictions under all alternatives. Under all alternatives, an additional 1,800 jobs would be added to the local economy.		
	Impacts of Each Alternative	- Slower population growth than in the past. - Sufficient housing supply may improve affordability in unincorporated areas. - Job growth that outpaces local workforce increases, leading to a tighter labor market.	- Higher population growth than in the past. - A housing supply deficit that increases affordability pressures. - Employment impacts similar to the Alternative 1 but less pronounced due to a smaller gap between workforce and job growth.	- Population increase combined with a significant housing deficit, and would heighten affordability pressures. - Even with a near balance of jobs and workers, the scale of growth could slightly increase unemployment or out-commuting.
	Mitigation Measures	Several optional mitigation measures could reduce housing impacts. These include zoning incentives to increase allowable density, height, lot coverage, and multi-family development; expanding water, sewer, and road infrastructure capacity; offering density bonuses for affordable housing; adopting policies and programs that support transitional, emergency, and supportive housing; and establishing cooperative programs with cities to expand affordable housing across jurisdictions.		
Cultural and Historic Resources	Impacts Common to All Alternatives	Proposed changes in land use classifications could influence future development, and those potential effects would apply to all alternatives. None of the alternatives would directly affect cultural resources. Very little of the county has been archaeologically surveyed. Thirty-six resources in the county are listed on the NRHP, the Washington Heritage Register, or the Washington Heritage Barn Register. Eight resources are in unincorporated areas and listed on the Washington Heritage Barn Register. None of these are archaeological sites. There are many potentially eligible buildings, structures, and sites that have not been evaluated.		
	Impacts of Each Alternative	Lowest potential for adverse effects because impacts on cultural resources generally increase with the level of development.	Moderately higher potential for impacts on NRHP-listed resources due to more development than Alternative 1.	Highest potential for impacts on NRHP-listed resources due to more development than Alternative 1.
	Mitigation Measures	- Development projects will be required to comply with applicable laws and regulations regarding impacts on cultural resources. Section 106, National Environmental Policy Act, Executive Order 21-02, SEPA, and Revised Code of Washington (RCW) 27.53, among others, require impacts on cultural resources be identified and mitigated. - Mitigation is developed at the project level, with the relevant laws generally requiring consultation with Native American Tribes, the Department of Archaeology and Historic Preservation, and other interested parties. - Additional mitigation options include adoption of policies and regulations that establish local processes and standards for cultural resource review, coordination, and protection.		

Resources	Element of Analysis	Alternative 1: No Action	Alternative 2: Moderate Growth	Alternative 3: High Growth
Transportation	Impacts Common to all alternatives	Sustained increases in population, housing, employment, and trip generation would result in the following impacts to the transportation system under all alternatives: - Higher traffic volumes on rural arterials and collectors would result in more frequent congestion, longer travel times, and accelerated pavement and bridge deterioration. Roadways in Areas D, E, F, G, H, and I would operate at LOS C or better and Areas B and E would continue to operate below LOS C. Roadways in Areas A and C would fall below LOS C in all alternatives. - There would be increased safety risks, particularly roadway departure crashes, turning movement conflicts, and freight-related collisions because of the county's high-speed rural roadway geometry and limited redundancy in the network. - An increase in conflicts between vehicle and non-motorized traffic would occur because the rural context limits the feasibility of continuous sidewalks, bike lanes, and protected crossings. - There would be an increase in disruption caused by periodic closure of climate vulnerable corridors as more travelers rely on a limited set of major county roadways.		
	Traffic and LOS	Overall, traffic volumes would rise across Residential, Mixed-Use, Commercial, and Industrial areas.	Traffic across major intersections will rise, leading to increased need for coordinated planning and strategic investment.	Traffic across major intersections will rise, leading to increased need for coordinated planning and strategic investment.
	Health and Safety Risks	Impacts would be relatively less than the Alternatives 2 and 3.	Higher traffic volumes may increase exposure to movement collisions at driveways serving Commercial and Industrial uses.	- Higher traffic volumes and increased freight activity would amplify existing safety risks across the rural network. - Roadway departure crashes, conflicts at uncontrolled intersections, and turning movement collisions would become more frequent as exposure increases. - Freight-related safety concerns would be more pronounced near Industrial land uses, where heavy vehicle traffic would grow substantially. - Climate vulnerable corridors, particularly those prone to flooding, storm surge, or landslides would pose greater operational and safety risks as more travelers rely on them for daily mobility. - Emergency response times could be affected by recurring congestion and limited detour options on the rural network.
	Multimodal Access and Mode Shift	- Walking and biking activity would increase around Mixed-Use centers, schools, and Commercial areas. - Increasing need to address bike and pedestrian safety; shoulder widening, sidewalk infill, and improved crossings, where pedestrian activity is already present.	- Walking and biking activity would rise, especially in Mixed-Use areas and near schools and Commercial centers. - Pedestrian and bicycle safety risks would become more pronounced, particularly along rural corridors with higher speeds and limited visibility. - Transit demand would increase more substantially. Grays Harbor Transit's fixed route services may experience crowding during peak periods and more demand response trip requests.	- Walking and biking activity would increase substantially in Mixed-Use areas and near schools, Commercial centers, and employment hubs. - Safety risks for pedestrians and cyclists would rise, particularly along high-speed rural corridors where multimodal facilities are limited or absent. - Transit demand would increase sharply. Fixed route services may experience crowding, and demand_response operations would face higher trip volumes.
	Potential Mitigation Measures	In addition to incorporated plan features and applicable regulations and commitments, other potential mitigation measures include the following: - Safety enhancements such as rumble strips or shoulder widening. - Roadway operations and system management such as access management, traffic control, and signal timing. - Roadway preservation, resilience, and structural improvements such as pavement preservation programs, bridge and culvert modernization and design upgrades on flood-prone corridors. - Transit and mobility enhancements such as transit stop upgrades and park-and-ride expansions. - Adoption of active transportation and complete streets policies and programs. - Land use and development coordination such as adoption of minimum LOS standards and development mitigation requirements. - Emergency response and network redundancy planning such as secondary access for communities with limited evaluation routes.		
Public Services and Utilities	Impacts Common to All Alternatives	- Proposed changes in land use classifications could influence future development, and those potential effects would apply to all alternatives. - Under all alternatives, population growth would result in increased demand for law enforcement services which may impact response times, investigative capacity and patrol coverage.		
	Law Enforcement	To maintain a level of service of 1.9 officers per 1,000 people, an additional 0.5 FTE officer would be needed.	Moderately higher potential for additional pressure on law enforcement staffing, response capacity, and overall operations. To maintain a level of service of 1.9 officers per 1,000 people, an additional 3.5 FTE officers would be needed.	Highest potential for increased workload, expanded resource needs, and operational impacts on law enforcement. To maintain the existing level of service of 1.9 officers per 1,000 people, an additional 6.5 FTE officers would be needed.

Resources	Element of Analysis	Alternative 1: No Action	Alternative 2: Moderate Growth	Alternative 3: High Growth
	Fire and EMS	Lowest potential for increased pressure on fire and EMS staffing, response capabilities, equipment needs, and overall service capacity.	Moderately higher potential for additional demand on fire and EMS resources, response times, and operational capacity.	Highest potential for expanded workload, greater resource requirements, and significant operational impacts on fire service and EMS.
	Parks and Recreation	Lowest potential for additional pressure on existing park resources, maintenance needs, programming capacity, and recreational infrastructure.	Moderately higher potential for added demand on parks facilities, recreational programming, staffing, and overall service capacity.	Highest potential for increased wear on existing parks, greater need for new recreational amenities, expanded maintenance responsibilities, and broader operational impacts on the parks and recreation system.
	Schools	Lowest potential for added pressure on school capacity, staffing needs, transportation services, and district resources in the affected districts.	Potential for impacts on school capacity, educational programming, and operational resources. It is likely that school district capital facilities plans for the affected districts would need to be updated to address the growth at rates higher than has occurred in the past.	Highest potential for operational impacts and the greatest need for expanded educational facilities and resources. It is likely that school district capital facilities plans for the affected districts would need to be updated to address the growth at rates that are significantly higher than have occurred in the past.
	Electrical Systems/ Telecommunications	Additional load on electrical and telecommunication infrastructure, though at the lowest level compared to the other alternatives.	Additional load on electrical and telecommunication infrastructure at a moderate level, higher than Alternative 1 but lower than Alternative 3.	Greatest additional load on electrical and telecommunication infrastructure, representing the highest increase among the three alternatives.
	Water Supply Systems	Additional demand on the water-supply system, though at the lowest level compared to the other alternatives.	- Additional demand on the water-supply system at a moderate level, greater than under the No Action Alternative but still less than Alternative 3. - There may not be sufficient water supply for growth within the unincorporated water service areas of McCleary, Montesano, Ocean Shores, and Westport.	- Greatest increase in demand on the water supply system, representing the highest level of impact among the three alternatives. - There may not be sufficient water supply for growth within the unincorporated water service areas of McCleary, Montesano, Ocean Shores, and Westport.
	Wastewater/Sanitary Sewer	Additional demand on the wastewater and sanitary sewer system, though at the lowest level compared to the other alternatives.	- Additional demand on the wastewater and sanitary sewer system at a moderate level, greater than under Alternative 1 but still less than what would occur under Alternative 3. - Growth in unincorporated sewer service areas of Illahee/Oyehut, McCleary, Montesano, Ocean Shores, and Westport may exceed sewer system capacity.	- Greatest increase in wastewater flows and loading on the sanitary sewer system, representing the highest level of impact among the three alternatives. - Growth in unincorporated sewer service areas of Illahee/Oyehut, McCleary, Montesano, Ocean Shores, and Westport may exceed sewer system capacity.
	Solid Waste	Additional demand on solid waste collection, transfer, and disposal services, though at the lowest level compared to the other alternatives.	Moderate increase in demand on solid waste collection, transport, and disposal systems, greater than under Alternative 1 but still less than Alternative 3.	Highest level of impact on collection capacity, hauling needs, and landfill or transfer station throughput among the three alternatives.
	Mitigation Measures	In addition to incorporated plan features and applicable regulations and commitments, other potential mitigation measures include the following: - Focusing growth in existing cities where services already exist. - Constructing larger number of lower cost EMS stations in lieu of providing full-service fire stations. - Evaluating water and sewer system capacity and construct system extensions and expansions to support additional growth. - Identifying school district transportation and facility needs in areas where higher amounts of growth are planned. - Starting conservation programs to reduce electric and water demand. - Establishing minimum levels of service to ensure that services keep pace with growth.		

Ecology = Washington State Department of Ecology
EMS = emergency medical services
FTE = full-time equivalent
GHCC = Grays Harbor County Code
LOS = level-of-service
NRHP = National Register of Historic Places

1.3.1 Significant Unavoidable Adverse Impacts

The following summarizes by Draft EIS section the significant unavoidable adverse impacts identified through this environmental review and analysis. No adverse impacts were identified for air quality, greenhouse gases, or cultural resources.

Even with the unavoidable impacts described as follows, the proposed Comprehensive Land Use Plan would still meet its core objectives because growth can be accommodated while maintaining essential environmental protections, land use direction, and service planning frameworks. These impacts do not prevent the County from achieving its long-term goals; rather, they underscore the importance of applying mitigation, updated policies, and ongoing planning as growth occurs.

Earth

- Alterations to topography and increases in impervious surfaces would change water flow patterns and groundwater movement resulting in increased erosion and water runoff.

Water Resources

- Population growth would result in increased overall demand for potable water, regardless of where growth is focused under the alternatives.
- Drinking water supply is expected to experience unavoidable, potentially adverse, impacts due to varying degrees of increased demand under all alternatives.

Plants and Animals

- Growth and associated increases in human activity, noise, and conversion of vegetated areas to development could result in a permanent loss of suitable habitat for fish and wildlife.

Land and Shoreline Use

- Growth would irreversibly convert vacant, partially developed, and redeveloped properties to more intensive Residential, Commercial, Mixed-Use, and Industrial uses.
- Urbanizing areas (particularly those designated for Mixed-Use or Urban Services) would continue to experience infill development and gradual increases in development intensity, shifting community character toward more urban land use patterns.

Population, Housing, and Employment

- Increases in population and employment would drive demand for a wider range of housing types and quantities, resulting in increased housing cost and reduced affordability if demand exceeds supply.

Transportation

- Growth-related increases in traffic volumes would lead to more frequent congestion, longer travel times, and faster deterioration of rural roadways, bridges, and other transportation infrastructure.

- Higher travel activity on a predominantly high-speed rural network will elevate safety risks, including roadway-departure crashes, turning-movement conflicts, and freight-related collisions.
- Conflicts between motorized and non-motorized users would increase, as rural roadway conditions often limit the feasibility of continuous sidewalks, bike lanes, and protected crossings.
- Reliance on a limited number of major corridors would heighten disruption caused by periodic closures of climate-vulnerable routes, affecting mobility for residents, visitors, and freight.

1.3.2 Mitigation

The Draft EIS identifies avoidance, minimization, and mitigation measures that could reduce potential impacts. Additional mitigation measures would be implemented through future project-level review, regulatory updates, or capital facility planning. Mitigation may include potential policy or regulatory measures such as the following:

- Updates to the Critical Areas Protection Ordinance (GHCC 18.06) and related development regulations using current best available science.
- Land use policies directing higher-intensity development to areas with existing or planned services and away from hazardous or environmentally sensitive areas.
- Zoning incentives that support efficient land use and reduce land use incompatibilities.
- Adoption of minimum roadway levels-of-service, requirements for traffic studies for new development, complete street policies, or adoption of new or updated road standards.
- Adoption of Washington State Department of Ecology's (Ecology's) Stormwater Management Manual for Western Washington (SWMMWW) county-wide to reduce stormwater impacts to surface and groundwater.
- Adoption of policies and regulations that establish local processes and standards for cultural resource review, coordination, and protection.
- Avoidance of development in geologically hazardous areas and incorporation of emergency preparedness and hazard-resilient design.
- Air quality protections and construction best management practices to minimize emissions and dust.
- Capital facilities and infrastructure planning or adoption of levels of service to ensure utilities and public services keep pace with growth.

1.4 Uncertainty and Issues to be Resolved

Key issues are those issues where the solution may limit the range of alternatives or commit the agency to take a particular direction, and that could have an adverse impact on the environment.

The following are key issues or areas of uncertainty:

- Location of future land use and growth
- Potential mitigation measures to be incorporated into the plan and regulations
- Level of capital improvements and public services needed to support future land use and growth

Prior to final plan adoption, the following issues are anticipated to be resolved:

- A preferred alternative will be developed.
- A new comprehensive land use plan with new goals and policies will be prepared.
- Updates to development regulations will be prepared consistent with the new land use plan.

1.5 Benefits and Disadvantages of Delaying the Proposed Comprehensive Plan

Delaying the action to update the existing Comprehensive Land Use Plan could include the following benefits:

- Allowing additional time to coordinate with cities, special districts, and state agencies
- Time to incorporate data updates for new information such as utility plan updates

There are several disadvantages to deferring the action:

- Prolonged reliance on outdated plans and standards can hinder effective mitigation, delay needed policy corrections, and reduce the usefulness of environmental analysis for near-term decisions.
- Potential loss of grant funding.
- Potential requirement for this Plan to be consistent and comply with new or revised state law based on adoption date.

2. Introduction

Grays Harbor County is preparing a comprehensive land use plan and updated development regulations in accordance with *Revised Code of Washington* (RCW) 36.70 (Planning Enabling Act). The Planning Enabling Act provides the authority and procedures for guiding and regulating growth and development for counties, including Grays Harbor County, which are not required to fully plan pursuant to the GMA. Pursuant to RCW 36.70, the County is required to adopt and maintain a comprehensive plan with a land use element and a circulation element. Development regulations must be consistent with the adopted plan. Consistent with these requirements, the County maintains a comprehensive plan that is more than 50 years old. Although not required to adopt a new or updated plan, the County is voluntarily preparing a new comprehensive land use plan to reflect current community needs.

2.1 Comprehensive Planning Overview

Comprehensive planning is a process that determines community goals and aspirations in terms of community development. This comprehensive land use plan is intended to guide growth in unincorporated areas of the county that is aligned with community goals and consistent with the applicable requirements of state law. The plan will refine and implement the following community vision and objectives for future growth and development:

Grays Harbor County will be a vibrant community that preserves its rural character and local identity while embracing new opportunities and well-planned growth. As a gateway to Washington's pristine coastal beaches and the scenic Olympic Peninsula, we highly value our beautiful natural surroundings and recognize the importance of balancing land uses to protect agriculture and environmentally sensitive areas while supporting development. A variety of housing options, living wage jobs, and shops, services and community spaces will make Grays Harbor County a pleasant and thriving place to live, work, visit and play. A mix of vehicle, bicycle, pedestrian, and transit options will provide efficient and accessible connections throughout the area. We will achieve our vision through community-guided decision making, by working closely with residents, businesses, and project partners.

The GMA establishes a comprehensive framework for coordinating land use planning and infrastructure development. The County is not required to fully plan under the GMA because it does not meet the population or growth thresholds identified in RCW 36.70A.040 and therefore plans as a “partially planning” jurisdiction.

As a partially planning jurisdiction, the 2027 Comprehensive Land Use Plan and its development regulations are required to address the designation and protection of critical areas and the designation of resource lands, including agricultural, forestry, and mineral lands. In addition to the GMA, the comprehensive plan and development regulations should also address statutory requirements related to emergency shelters, transitional housing, emergency housing, and permanent supportive housing under RCW 36.70.755, as well as the siting of organic materials management facilities in a manner consistent with the County’s solid waste handling plan under RCW 70A.205. The County is not required to adopt a GMA comprehensive plan or comply with other GMA requirements, such as concurrency or the designation of urban growth areas.

2.1.1 Planning Area

Grays Harbor County has approximately 1,900 square miles (1,218,700 acres) of land area, most of which is unincorporated. According to the Washington State OFM estimates, the population for 2024 was approximately 77,400 (OFM 2025a). The planning area is the unincorporated county, which is approximately 38% of the total population.

The county lies along the southwestern portion of the State of Washington and is bounded by the Quinault Nation on the northwest. The county shares boundaries with Jefferson (north), Mason (east), Thurston (east), Lewis (south), and Pacific (south) counties. The major population center of the county is in the Hoquiam-Aberdeen Cosmopolis area, at the head of Grays Harbor. Remaining population areas are located along the coast or in the Chehalis River valley. The county encompasses several unincorporated communities, including the following:

- Copalis Crossing
- Grayland
- Humptulips
- Neilton
- Taholah
- Amanda Park
- Pacific Beach
- Wishkah
- North River
- Central Park
- Copalis Beach
- Moclips
- Porter
- Malone
- Brady

Federal lands occupy roughly 6 to 8% of the county's land area, primarily in the northeast near Lake Quinault and the Olympic Peninsula. The Quinault Indian Nation reservation covers about 208,150 acres (325 square miles); approximately 17% of the county's total land area. The Confederated Tribes of the Chehalis Reservation extends to the southeast portion of the county.

2.1.2 Planning and Policy Contexts

The current institutional planning framework in the County involves coordination between the Board of County Commissioners (BOCC), the Planning Commission, and the Planning Division. The BOCC has authority over the adoption of the proposed Comprehensive Land Use Plan, with input from the Planning Commission and the Planning Division. Refer to Section 3.5, Land and Shoreline Use, for more information on local, regional, state, tribal, and federal planning and policy context.

2.2 State Environmental Policy Act Review

Grays Harbor County has codified its SEPA procedures in GHCC Chapter 18.04, which adopts relevant sections of *Washington Administrative Code* (WAC) 197-11 by reference. GHCC Chapter 18.04 adopts the following policy documents as substantive authority pursuant to WAC 197-11-660:

- Comprehensive plan
- Shoreline management master program
- Subdivision ordinance
- Comprehensive water and sewer plans

The SEPA Determination of Significance was issued on July 17, 2025, for the 2027 Grays Harbor County Comprehensive Land Use Plan. The determination was made by the Grays Harbor County

Planning and Building Division, indicating that the proposed plan is likely to have a significant adverse impact on the environment and will require an EIS.

The SEPA environmental review process provides a way to identify and assess the possible environmental effects of the proposed Comprehensive Plan. It provides information to the public, tribes, and agencies involving the identification and evaluation of probable environmental impacts, the exploration of reasonable alternatives that would mitigate adverse impacts, and the development of mitigation measures to reduce those impacts.

2.2.1 Draft Environmental Impact Statement

The SEPA Determination of Significance was issued on July 17, 2025, for the 2027 Grays Harbor County Comprehensive Land Use Plan, indicating that the proposed plan is likely to have a significant adverse impact on the environment and will require an EIS. This Draft EIS is supported by the necessary environmental analysis that enables government agencies and interested citizens to review and comment on the proposed Comprehensive Land Use Plan. It is a comparative evaluation of alternative courses of action considered for the proposed Comprehensive Land Use Plan based on different growth or land use patterns, county-wide planning policies, and development regulations. It is an impartial discussion of environmental impacts to inform decision makers and the public of reasonable alternatives, including mitigation measures, which would avoid or minimize adverse impacts or enhance environmental quality. The environmental review process involves the identification and evaluation of probable environmental impacts and the development of mitigation measures that will reduce the impacts. The level of detail for environmental analysis is programmatic and area wide.

Study Area

The planning area for the proposed Comprehensive Land Use Plan is defined by the unincorporated county's jurisdictional boundaries (i.e., does not cover areas within incorporated cities). The study area for the analysis of each element of the environment is defined based on the type of impacts anticipated, with some studies centered more on identified areas of potential growth.

Scoping

As part of the EIS process, the County conducted a scoping period to gather public input on the range of alternatives to be analyzed, the issues and impacts to be considered, and the geographic areas and resources that may be affected. The County informed the public and other agencies that an environmental document was being prepared. A request for comments on the proposed planning alternatives and the scope of the associated environmental review (RCW 43.21C) was published July 17, 2025. A scoping period was held allowing written comments and testimony to inform defining of alternatives and the scope of the EIS. The scoping period closed August 22, 2025.

The County considered the results of expanded SEPA scoping, public outreach, and formal notice procedures to refine alternatives, focus the EIS on significant issues, eliminate insignificant impacts, and identify the alternatives for detailed analysis. As part of the scoping process, the County conducted extended public comment periods, provided opportunities for written and online submittals from individuals and engaged agencies.

To ensure broad and equitable public notice, the County also employed standard SEPA outreach tools, including publishing notices in a newspaper of general circulation, and emailing or mailing notices to individuals or organizations requesting them. In addition, notices were published in the SEPA Register maintained by Ecology, consistent with SEPA requirements. These combined methods allowed the County to gather input needed to refine alternatives, narrow the EIS to significant environmental issues, and identify the reasonable alternatives to be carried forward for analysis.

Public Feedback

Scoping engagement involved a total of 576 people, including four in-person events with 53 attendees, and 526 online survey responses (survey closed August 15, 2025). Public input highlighted the county's strong sense of community, rural lifestyle, and access to outdoor recreation as its most valued strengths, while concerns centered on limited job opportunities and industry diversity, maintenance of public facilities, public safety, and access to critical services.

Public feedback emphasized preserving the county's rural character while expanding affordable and diverse housing options and supporting job growth and economic revitalization. Participants also prioritized improvements to public infrastructure and services, protection of natural resources and wildlife, enhanced public safety and homelessness solutions, and more community gathering spaces, particularly those serving youth. In addition, respondents expressed strong interest in expanded transportation choices, improved internet connectivity, thoughtful tourism and coastal development, and greater government transparency with reduced regulatory burden.

The County has issued this Draft EIS with a 30-day comment period. It is anticipated that a Final EIS will be issued in summer 2026. The Final EIS will contain responses to comments received during the comment period. The County has and will host public meetings on the proposed Comprehensive Plan. For a summary of past meetings and notices of future meetings, refer to the County website for more information¹.

2.3 Proposed Draft EIS Alternatives

SEPA requires consideration of a sufficiently wide range of alternatives to achieve the objectives. Three alternatives were studied in this Draft EIS. Under all alternatives, the proposed land use map and areas of anticipated growth are the same as shown in Figure 2-1. The following alternatives are based on the Washington State OFM 2024 population estimate for the county as the baseline. Table 2-1 summarizes the associated policy and code updates for projected growth for each alternative.

- **Alternative 1** – The No Action Alternative plans for a population of approximately 81,270, about a 5% increase over the 2024 OFM estimate, and retains land use patterns consistent with existing development, with only limited updates for consistency with the community vision and partially planning GMA requirements. New Residential growth is assumed to accommodate the level of projected population. Retail Commercial growth of 300,000 square feet and Industrial growth of 1,000,000 square feet are assumed.

¹ [Grays Harbor Comprehensive Plan](#)

- **Alternative 2** – The Moderate Growth Alternative plans for a population of approximately 85,140, reflecting a 10% increase over 2024, and maintains the same land use patterns as Alternative 1 but includes additional Residential growth to accommodate the higher level of projected population growth. Retail Commercial and Industrial growth is the same as Alternative 1.
- **Alternative 3** – The High Growth Alternative plans for a population of approximately 89,010, reflecting a 15% increase over 2024, and maintains the same land use pattern as Alternative 1 but includes additional Residential growth to accommodate the higher level of projected population growth. Retail Commercial and Industrial growth is the same as Alternative 1.

Figure 2-1. Areas of Anticipated Growth in Unincorporated Grays Harbor County

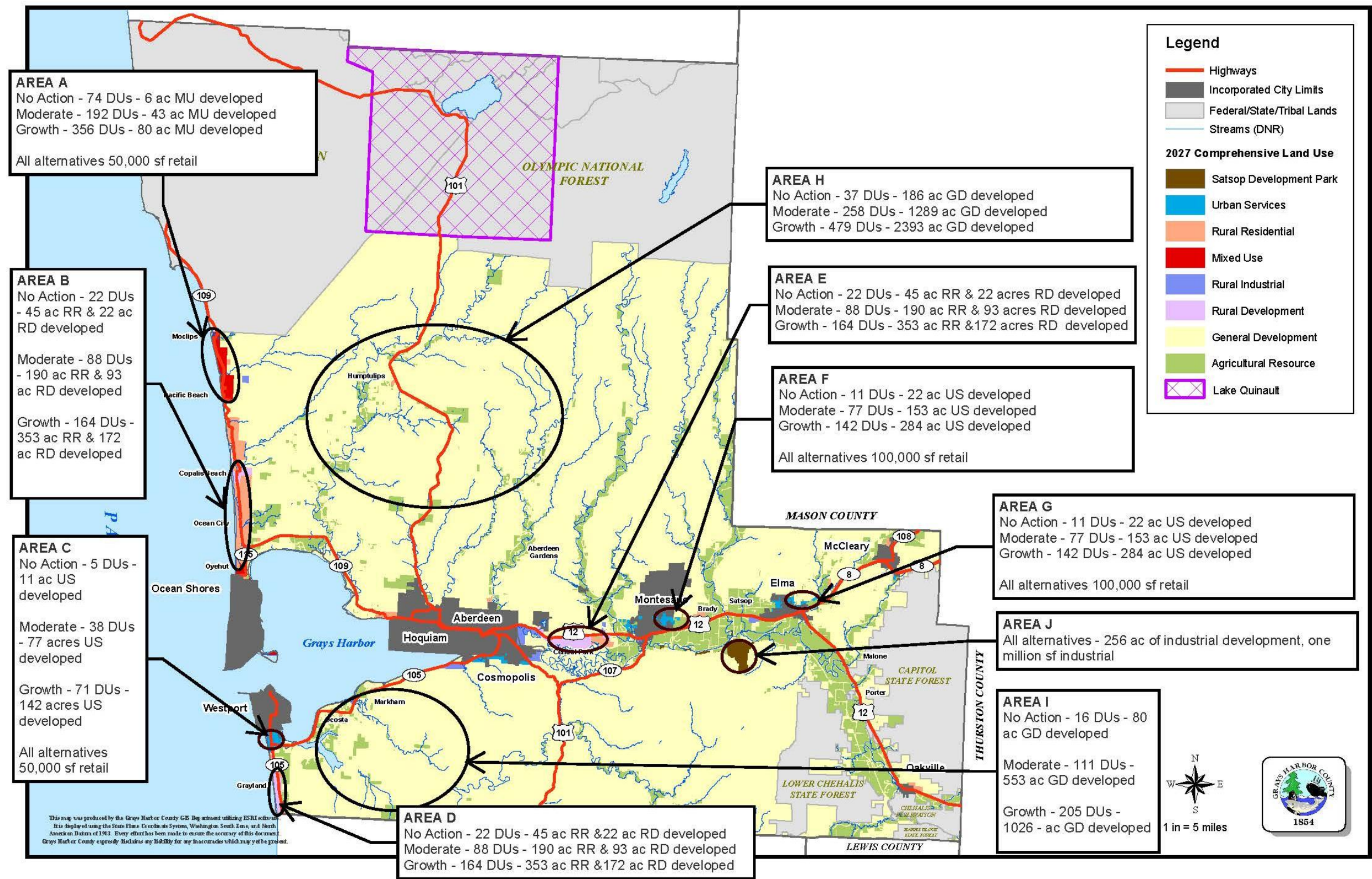


Table 2-1. Proposed Updates for Projected Growth by Alternative in Unincorporated County

Alternative	Projected Growth 2037			Proposed Policy/Code Update
	Population	Housing	Employment	
Alternative 1: No Action	507	212	1,800	▪ Policies prioritize development in areas with existing infrastructure and public services. ▪ Policies protect critical areas and resource lands from incompatible uses and densities. ▪ Policies encourage rural lifestyle and retain existing land use patterns. ▪ Critical areas regulations are updated consistent with GMA requirements. ▪ Zoning maps and GHCC Titles 16,17 and 18 are updated consistent with the land use plan.
Alternative 2: Moderate Growth	3,522	1,474	1,800	▪ Same policies as Alternative 1. ▪ Policies support development of additional housing, including higher densities, taller building heights, and/or reduced lot coverage. ▪ Policies encourage intensification of development within existing utility and public service areas.
Alternative 3: High Growth	6,537	2,735	1,800	▪ Same policies as Alternative 2. ▪ Policies to expand capacity of utility infrastructure and public services. ▪ Policies to expand capacity of transportation systems.

2.3.1 Land Use by Alternative

The 2027 Comprehensive Land Use Plan for all alternatives uses the same land use map with sufficient acreage in each land use designation to accommodate the growth expected under all alternatives. Acreage in each land use designation proposed on the 2027 Comprehensive Land Use Plan map is shown in Table 2-2. Acres needed in each designation to accommodate the growth expected for each alternative is shown in Table 2-3.

Table 2-2. Acres by Land Use Designation for All Alternatives in Unincorporated County

2027 Comprehensive Land Use Plan Designation	Total Acres	Percent Total Acres All Alternatives
Agricultural Resource	74,271	6.7%
General Development	628,366	57.0%
Lake Quinault	72,879	6.6%
Rural Development	3,415	0.3%
Rural Industrial	1,973	0.2%
Rural Residential	6,485	0.6%
Satsop Development Park	1,760	0.2%
Urban Services	2,433	0.2%
Mixed-Use	2,012	0.2%
Federal/State/Tribal	309,102	28.0%
Total	1,102,697	100.0%

Table 2-3. Development Acres Needed in Unincorporated County For Each Alternative

2027 Comprehensive Land Use Plan Designation	Acres by Alternative		
	Alternative 1	Alternative 2	Alternative 3
Agricultural Resource	176	1,223	2,270
General Development	265	1,842	3,419
Lake Quinault	8	59	109
Rural Development	75	339	604
Rural Industrial	0	0	0
Rural Residential	91	634	1176
Satsop Development Park	256	256	256
Urban Services	105	433	761
Mixed-Use	16	53	90
Federal/State/Tribal	0	0	0
Total	992	4,839	8,685

Table 2-4 summarizes the anticipated land use changes and development acreage across 10 potential growth areas, along with the corresponding land use designations under the No Action, Moderate Growth, and High Growth alternatives.

Table 2-4. Land Use Designation and Development by Alternative in Unincorporated County

Growth Areas	Alternative	Potential Growth Areas	Estimated Development (acres)	Estimated Distribution by 2027 Comprehensive Land Use Plan Designation
Area A	1	No Action	6	Mixed-Use (All)
	2	Moderate Growth	43	
	3	High Growth	80	
	All Alternatives (50,000 ft ² Retail)		10	
Area B	1	No Action	67	45 acres Rural Residential/22 acres Rural Development developed
	2	Moderate Growth	283	190 acres Rural Residential/93 acres Rural Development developed
	3	High Growth	525	353 acres Rural Residential/172 acres Rural Development developed
	All Alternatives		10	Rural Development
Area C	1	No Action	11	Urban Services (All)
	2	Moderate Growth	77	
	3	High Growth	142	
	All Alternatives (50,000 ft ² Retail)		10	
Area D	1	No Action	67	45 acres Rural Residential/22 acres Rural Development developed
	2	Moderate Growth	283	190 acres Rural Residential/93 acres Rural Development developed
	3	High Growth	525	353 acres Rural Residential/172 acres Rural Development developed
	All Alternatives		10	Rural Development
Area E	1	No Action	67	45 acres Rural Residential/22 acres Rural Development developed

Growth Areas	Alternative	Potential Growth Areas	Estimated Development (acres)	Estimated Distribution by 2027 Comprehensive Land Use Plan Designation
	2	Moderate Growth	283	190 acres Rural Residential/93 acres Rural Development developed
	3	High Growth	525	353 acres Rural Residential/172 acres Rural Development developed
	All Alternatives		10	Rural Development
Area F	1	No Action	22	Urban Services (All)
	2	Moderate Growth	153	
	3	High Growth	284	
	All Alternatives (100,000 ft ² Retail)		20	
Area G	1	No Action	22	Urban Services (All)
	2	Moderate Growth	153	
	3	High Growth	284	
	All Alternatives (100,000 ft ² Retail)		20	
Area H	1	No Action	186	General Development (All)
	2	Moderate Growth	1,289	
	3	High Growth	2,393	
Area I	1	No Action	80	General Development (All)
	2	Moderate Growth	553	
	3	High Growth	1,026	
Area J	All Alternatives	Industrial, Manufacturing, Technology Business Park, 1,000,000 ft ²	256	Satsop Development Park

ft² = square foot (feet)

2.3.2 Future Alternatives

As a result of evaluation by the County and community, a preferred alternative will be developed based on the community vision that falls within the range of the alternatives analyzed in this Draft EIS. The final preferred alternative will be incorporated into the 2027 Comprehensive Land Use Plan and evaluated in a Final EIS anticipated to be complete by fall 2026. In addition to adoption of the 2027 Comprehensive Land Use Plan, Updates to the County's critical area regulations consistent with GMA requirements may also be included in the preferred alternative.

3. Environmental Consequences

Pursuant to SEPA and in the context of the County's GMA obligations, this chapter analyzes the environmental effects of the alternatives. The analysis is programmatic and area wide, with topic specific study areas delineated based on anticipated impact pathways; certain topics emphasize locations where growth is most likely to occur. The evaluation relies on the regulatory and baseline information presented in the affected environment.

The following elements of the environment were identified during the scoping process and will be reviewed in this chapter as potentially having significant impacts under the proposed action:

- Earth
- Air quality
- Water resources
- Plants and animals
- Land and shoreline use
- Population, housing, and employment
- Cultural resources
- Transportation
- Public services and utilities

Other resources were not reviewed as they were unlikely to be significantly impacted.

3.1 Earth

This section describes the existing geologic, geomorphic, and geotechnical conditions of the county, incorporating data such as general topography, soils, geologic formations, natural hazards, public safety, and mineral resources. The regulations and policies are described, as well as the potentially significant impacts for each alternative. Finally, opportunities to avoid or mitigate such impacts are provided.

The study area is defined by the County's jurisdictional boundaries, with areas of more intensive review centered on areas related to the areas of potential growth. For additional information about the proposed alternatives, see Chapter 2, Alternatives.

3.1.1 Affected Environment

The county has been shaped by a long history of tectonic activity, glacial advances, and retreats, post-glacial rebound and changing relative sea levels, landsliding, and riverine erosion and deposition (Logan 2003a and 2003b; Booth et al. 2005; Moe 2025). The Willapa Hills forming much of the county consist of marine volcanic rock accreted to the continent by tectonic forces more than 50 million years ago (Logan 2003a and 2003b). To the north, the Willapa Hills merge into the Olympic Mountains (DNR n.d.-a). Running through both the Olympic Mountains and Willapa Hills are numerous valleys that reflect alpine and continental glacier influence as well as modern riverine processes of erosion and deposition (Logan 2023a and 2023b). Post-glacial tectonic uplift as well as an active subduction zone off the coast have resulted in relative sea level fluctuations that have played a major role in shaping both the shoreline and low-lying areas connected to the shoreline (Phipps et al. 2015).

Regulatory Setting

Federal, state, and local regulations govern the identification and treatment of both geologically hazardous areas and resource protection areas.

Geologically Hazardous Areas

Under Washington's GMA, all counties are required to adopt development regulations that designate and protect critical areas, including geologically hazardous areas, to reduce risks to public safety, property, and environmental resources. The GMA explicitly identifies geologic hazards as critical areas that are managed using best available science in a way that avoids or mitigates geologic risks.

Geologically hazardous areas are one of the five regulated critical area types in GHCC18.06 designed to protect critical areas in unincorporated portions of the county. These are lands where the geology, slope, soils, and/or hydrologic conditions create a significant risk of erosion, slope failure, seismic damage, or related instability that could endanger public safety or property.

The following geologically hazardous areas regulated by the County are designated by GHCC 18.06.550:

- Erosion hazard areas have soil and slope conditions that are prone to accelerated erosion under natural processes or development disturbance, requiring protective measures to avoid sediment loss and instability (Figure 3.1-1). To identify where erodible soils and steep gradients coincide, the County relies on information such as the U.S. Department of Agriculture (USDA) Soil Survey for Grays Harbor County and U.S. Geological Survey (USGS) slope data, along with Washington State Department of Natural Resources (DNR) hazard datasets, including liquefaction, seismic site class, and tsunami hazard maps.
- Landslide hazard areas include slopes or geological settings susceptible to mass wasting where ground movement may be triggered or exacerbated by saturation, seismic shaking, or grading (Figure 3.1-1). GHCC 18.06 defines landslide hazard areas as soils mapped by the USDA National Resources Conservation Service as having a significant limitation for building site development, shoreline slopes mapped as Class U (Unstable), UOS (Unstable—Other Selected), or URS (Unstable—Recent Slide) in Ecology's Coastal Atlas (n.d.-d), and landforms designated as Quaternary slumps, earthflows, mudflows, lahars, or landslides in USGS or DNR mapping. The County does not map landslide hazard areas. Geotechnical investigation is required for development.
- Landslide hazard areas include slopes or geological settings susceptible to mass wasting where ground movement may be triggered or exacerbated by saturation, seismic shaking, or grading (Figure 3.1-1). GHCC 18.06 defines landslide hazard areas as soils mapped by the USDA National Resources Conservation Service (NRCS) as having significant limitations for building site development; shoreline slopes mapped as Class U (Unstable), UOS (Unstable—Other Selected), or URS (Unstable—Recent Slide) in Ecology's Coastal Atlas; and landforms designated as Quaternary slumps, earthflows, mudflows, lahars, or landslides in U.S. Geological Survey (USGS) or Washington Department of Natural Resources (DNR) mapping. The County does not map landslide hazard areas. Geotechnical investigation is required for development.
- Liquefaction hazard areas have saturated, loose granular soils that may lose strength and behave fluidly during seismic events, leading to settlement or lateral spreading and structural damage. Liquefaction in Washington is most common in river valleys, coastal lowlands, deltas, artificial fill, or areas with young Holocene sediments (Figure 3.1-2). These areas are identified using Washington Geological Survey (DNR) liquefaction susceptibility maps for the county together with local soil and slope information from the USDA Soil Survey and USGS elevation data (DNR n.d.-e). Liquefaction susceptibility maps identify relative potential, not site-specific hazard. Geotechnical investigation is still required for development.
- Tsunami hazards are coastal areas and large lake shorelines susceptible to flooding as a result of excessive wave action from seismic or other geologic events such as landslides (Figure 3.1-2). DNR has mapped tsunami hazard zones for the county, including coastal communities and the Lower Chehalis River estuary.
- Other geologic hazard zones also include seismic hazard areas (strong ground shaking, lateral spreading, surface fault rupture), mass wasting processes such as rockfall, debris flows/avalanches and mudflows, areas prone to differential settlement, and coastal or fluvial bluffs subject to rapid erosion or undercutting, where instability could threaten life or property; such areas are reviewed through the County's critical areas framework, including site-specific geotechnical analysis.

Mineral Lands

Mineral resource lands of long-term commercial significance are one of three classes of Natural Resource lands protected by RCW 36.70A.170. Under the GMA, counties must designate mineral resource lands that are not already characterized by urban growth and that have long-term significance for mineral extraction. These lands include parcels that have active, permitted mines under the Surface Mining Act (Appendix A-3), property with known or potential mineral resources on parcels 10 acres or larger, and parcels surrounded by lots at least 5 acres in size. Such lands are mapped using geologic resource information (documented sand, gravel, and aggregate deposits), and parcel size criteria established in the County's Mineral Lands Ordinance, and these designated areas are shown on an adopted mineral resource lands map for regulatory use. For more information on Resource Lands designation, refer to Section 3.5, Land Use. The DNR is scheduled to complete mapping aggregate resources in June 2026.

Existing Conditions

The following describes the physical setting of the unincorporated county as it relates to landform, geologic conditions, soil characteristics, and natural hazards. These baseline conditions affect development suitability, infrastructure needs, and potential exposure to natural hazard risks, and form the basis for the earth-related impact analysis presented later in this chapter.

Topography

Topography in the county is dominated by rolling hills, with notable broad, flat river valleys, coastal estuaries, and beach/dune complexes along the coast. Development tends to be concentrated in the river valleys and along the coast. Potential growth Areas A and B are dominated by rolling hills, with some beach areas along the coast. Areas C and D consist of low-lying beaches and dunes. Areas E, F, and G are dominated by the flat topography of the Chehalis River floodplain with rolling hills to the north. Areas H, I, and J are dominated by rolling hills and alluvial valley bottoms, which is where development tends to be concentrated.

Figure 3.1-1. Erosion Hazards in Unincorporated Grays Harbor County

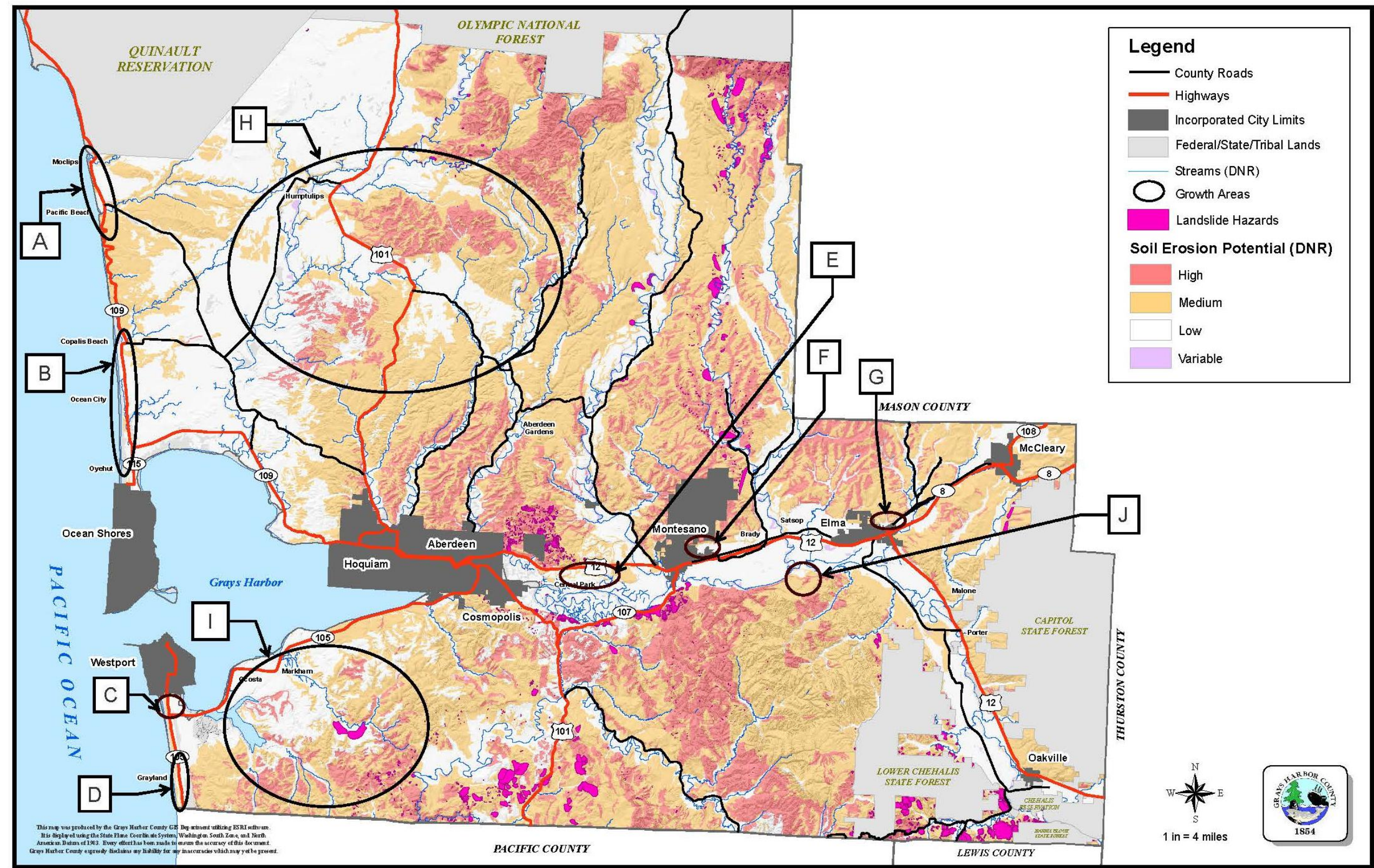
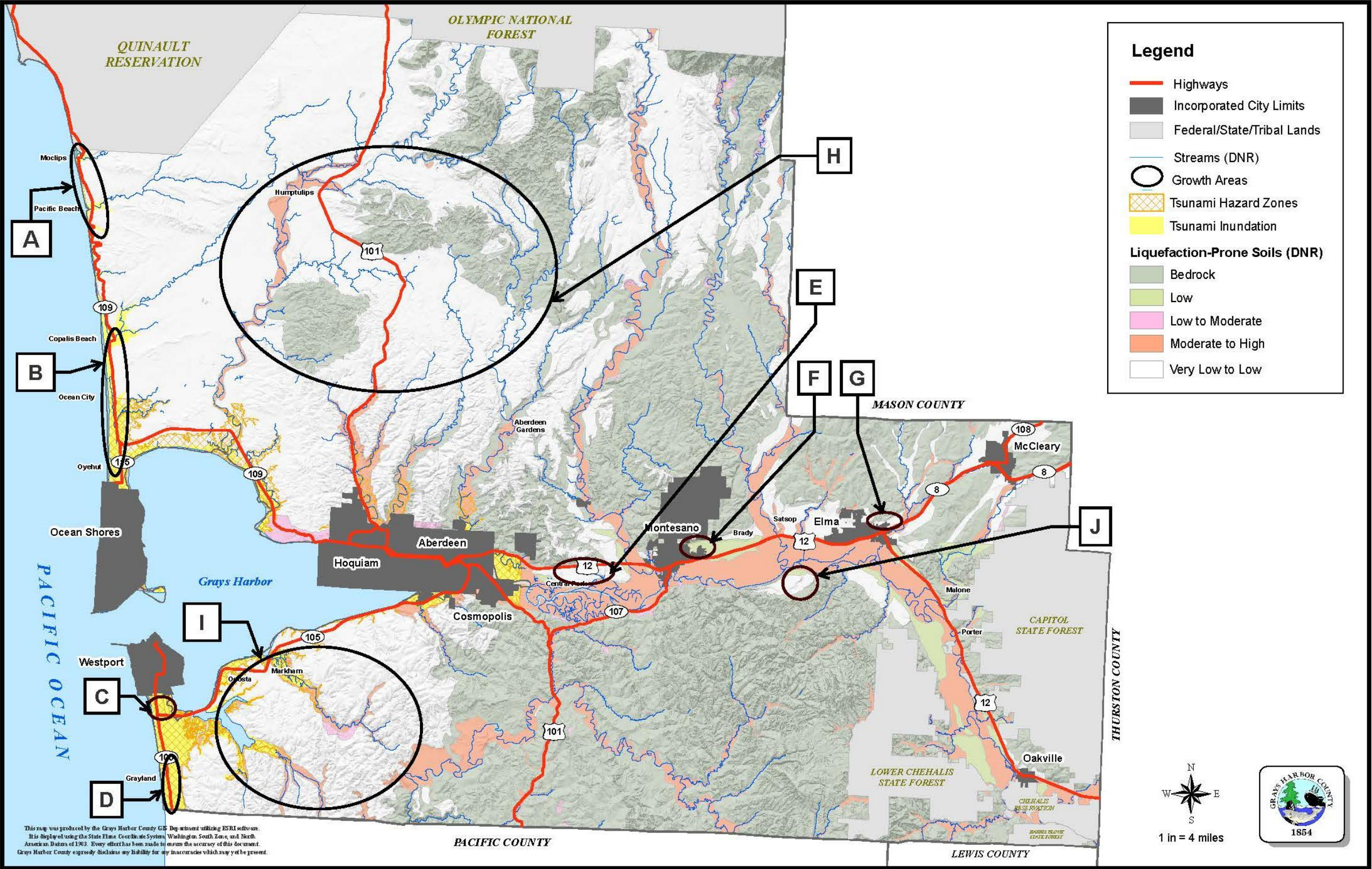


Figure 3.1-2. Seismic Hazards in Unincorporated Grays Harbor County



Geology and Soils

Geologic conditions in the unincorporated county areas reflect the interaction of coastal, fluvial, glacial, and bedrock processes across the landscape. Along the coast, geology is dominated by extensive beach deposits and dune systems (Logan 2003b). Inland river valleys of the Chehalis, Humptulips, and Quinault Rivers are underlain by alluvium and continental glacial outwash and drift, consisting of sorted silt, sand, and gravel left by rivers and earlier continental ice advances (Logan 2003a and 2003b). Upland areas are composed of alpine glacial outwash and drift, with stratified sands and gravels filling former meltwater channels and terraces. The highest elevations and more rugged terrain expose older Miocene to Eocene marine sedimentary rocks and, in places, lower Eocene basalt, forming the structural geologic framework of the eastern and northeastern hills (Logan 2003a).

Soils in the county broadly mirror this geological pattern. More than 100 soil units are mapped in the county (Washington Spatial Data n.d.), and distribution reflects the underlying parent material—from coastal sands to alluvial silts to weathered sedimentary and volcanic bedrock. Zenker soils, the most abundant county-wide, are derived from non-carbonate sedimentary rock, while Hoquiam soils, among the next most common, form on silty alluvium over sand and gravel typically associated with alpine outwash and drift. Table 3.1-1 shows the 15 soil units that make up at least 2% of the total county area, and their parent material.

Table 3.1-1. Common Soils in Grays Harbor County

Common Soil Units^[a]	Parent Material	Acres	Percent Coverage in County
Zenker	Non-carbonate marine sedimentary rock	72,897	5.90
Hoquiam	Silty alluvium over sand and gravel	68,221	5.52
Mopang	Silty alluvium over sand and gravel	63,713	5.16
Hoko	Glacial till	58,236	4.71
Lebar	Alluvium covered by volcanic ash and/or wind deposits	53,117	4.30
Calawah	Volcanic ash over glacial outwash	47,611	3.85
Buckpeak	Non-carbonate sedimentary bedrock	47,521	3.85
Lytell	Non-carbonate sedimentary bedrock	47,141	3.82
Elochoman	Non-carbonate sedimentary bedrock	39,994	3.23
Centralia	Non-carbonate sedimentary bedrock	31,878	2.58
Nemah	Clayey or fine-textured old alluvium	30,646	2.48
Willaby	Glacial marine sediments	30,131	2.44
Copalis	Glacial drift	29,713	2.36
Zysyl	Basic igneous bedrock	27,408	2.22
Wishkah	Glacial lake sediments	26,3718	2.13

Note: For detailed soil mapping, refer to the USDA Web Soil Survey (USDA n.d.).

^[a] Soil units making up more than 2% of the total area.

Natural Hazards and Public Safety

Natural hazards such as flooding, landslides, erosion, seismic shaking, and areas of geologic instability can pose public health and safety concerns within unincorporated areas of the county. Development in or near these hazard areas is generally considered unsuitable unless it can be designed to avoid or mitigate risks, consistent with the County's critical areas regulations and the GMA, which require protecting life, property, and natural hazard functions. Table 3.1-2 shows a summary of geology and soils in potential growth areas.

Table 3.1-2. Geology and Soil Summary in Potential Growth Areas

Potential Growth Areas	Geology and Soils
A and B	- Alpine glacial outwash (uplands): stratified sand and gravel from pre-Vashon meltwater streams (Qapo, Qapwo2, Qapwo1) - Coastal fringe: beach deposits (Qb): sand with minor shell fragments; includes dunes and minor estuary deposits
C and D	- Dominant: beach deposits (Qb) along the coast - Localized: alluvium (Qa) sorted silt, sand, and gravel from rivers/streams
E and F	- Holocene alluvium (Chehalis River): recent fluvial silt/sand/gravel - Pre-Fraser continental drift/outwash: sand and gravel similar to alpine outwash but derived from continental ice - Miocene marine sedimentary rock: coarse- to fine-grained, typically friable sandstone (Mm(1a), Mm(2m)) - Alpine glacial outwash: Qapo(wc)
G	- Lower areas: Chehalis River Holocene alluvium and pre-Vashon continental glacial outwash - Hillsides: Miocene marine sedimentary rock unit
H	- Uplands: alpine glacial outwash units (various ages), similar to A and B - High elevations (bedrock): Miocene marine sedimentary rocks (plus related Mm(2ms), Mm(2mt)); older Oligocene: Eocene marine sedimentary units (OEmlc, Em1, Em1c, Em2, Em1h) and lower Eocene basalt (Evc, Evcf) - Valley alluvium: narrow modern alluvium (Qc) along the Humptulips River - Structural geology: several mapped faults in bedrock and one roughly parallel to the Humptulips River

Source: National Resources Conservation Service n.d.

Em1, Em1c, Em2, Em1h = Eocene marine sedimentary units

Evc, Evcf = Lower Eocene basalt units;

Mm(1a), Mm(2m), Mm(2ms), Mm(2mt) = Miocene marine sedimentary rock units (sandstone, friable)

OEmlc = Oligocene

Qa = Alluvium (sorted silt, sand, gravel from rivers/streams)

Qapo, Qapwo2, Qapwo1 = Alpine glacial outwash (differing ages)

Qapo(wc) = Alpine glacial outwash (west-coast mapped variant)

Qb = Beach deposits (sand with minor shell fragments; dunes/estuarine inclusions)

Qc = Modern/Recent alluvium (Holocene)

3.1.2 Potentially Significant Impacts

This section summarizes the potential impacts assessment completed for the alternatives and earth resources. This section will also consider how changing development will be at risk from geohazards and other considerations. The potential for impact from each alternative, discussed in the following sections, will generally increase with increasing levels of development.

Methods of Analysis

This analysis provides a high-level qualitative assessment of how projected growth alternatives may influence landscape processes, critical areas, and earth resources, and how existing natural hazards may interact with future development. The assessment relies on existing mapping to identify whether a hazard or resource is present within each development area. Erosion Potential from soil mapping (Washington Spatial Data n.d.) was used to identify erosion hazard areas. Construction Hazard of Severe was used to identify landslide hazard areas. Where no such feature is mapped, impacts under the alternatives are assumed to be low; where a hazard or resource is present, potential impacts generally increase with the scale of development. Current County, state, and federal regulations require avoiding or minimizing development in hazardous or sensitive areas, which substantially reduces or prevents these impacts. As an example, if a planning area contains landslide-hazard zones but an alternative avoids those zones, no landslide-related impact would occur.

Impacts Common to All Alternatives

The impacts discussed in this section are common to all alternatives and reflect underlying public safety risks that may increase with development, depending on localized environmental conditions. All three alternatives have the potential for significant effects that increase with the level of development, particularly in areas of mapped geologic hazards.

Table 3.1-3 summarizes the results of the analysis on the potential impacts of each type of geologic hazard in the county and the potential impacts on public safety common to all alternatives, particularly in areas of potential growth in unincorporated areas.

Seismic Hazards

All regions in the county would likely be impacted by seismic shaking to some degree, but some areas would be exposed to greater risk than others due to differences in topography, geology, or soils. For example, structures in proximity to steep slopes, unstable or noncohesive soils and geologic units, fault lines, burned areas, and streams or rivers are at greater general risk during a seismic event. Developments without proper seismic design precautions may also be at greater risk during seismic events.

Erosion Hazards

Growth Areas B, C, and D consist of soils with mostly low erosion potential, which results in a low potential for adverse effect in all three alternatives. Areas A and G are a mix of mostly medium and low erosion potential soils, and have a moderate potential for adverse effects by Alternatives 2 and 3, with increasing magnitude as development increases, particularly in those regions of moderate erosion potential. Areas E, F, H, and I are all composed of a mix of low, medium, and high erosion potential soils. These areas have moderate to high potential of adverse effects from

all three alternatives, and this potential increases with increasing development, particularly in the regions with medium to high erosion potential.

Table 3.1-3. Potential Risks to Geologically Hazardous Areas in Unincorporated County

Landslide Hazards	
Historic Landslides	Areas E, H, and I are mapped as having areas with historical landslide activity.
Potential Landslide Risk	Areas F, G, and J are similar geologically, and include areas likely to present a landslide risk due to steep slopes or areas near fluvial waterbodies.
Erosion Hazards	
Erosion Potential	- Areas A, B, C, and D are coastal development areas with a mix of no hazard, slight hazard, or moderate hazard, with small pockets of severe hazard running generally parallel to the coastline and to State Route 105. - Areas E and F are associated with a mix of no hazard (in the Chehalis River valley), slight hazard, moderate hazard, and severe hazard. The severe hazards comprise more than 10% of these development areas. - Area G is mostly a mix of no hazard and slight or moderate hazard. Less than 10% of the area has severe soil hazards. - Areas H and I have a range of soil hazards from no hazard to severe hazard. No hazards are generally associated with the larger river and stream valleys, whereas the moderate and high hazards are present along the rolling hills. - Area J has largely moderate hazard, with less than 10% severe hazard. As with historic landslide activity, soils hazard mapping indicates that all alternatives have potential for adverse impacts, with the potential increasing with increased development.
Seismic Hazards	
Fault Zones	Areas A and B have active faults that could pose a risk to developments. This risk grows with increasing development in these areas.
NEHRP Seismic Site Class	All areas except Area J include regions with NEHRP seismic site class ratings of D or D-E, which indicates soft soils and potentially greater risk of shaking associated with an earthquake. Accordingly, all areas except Area J have a potential for adverse effects that increases with increasing development.
Liquefaction Susceptibility	All areas except Area J have some liquefaction susceptibility. Of the remaining areas, most have a moderate to high susceptibility associated with coastal or fluvial waterbodies. Accordingly, all areas except Area J have a potential for adverse effects that increases with increasing development.
Tsunami Hazard Areas	- Tsunamis are primarily a coastal threat, but can also travel up river valleys in low-lying areas. - All areas except for Areas H, J, and G are located within tsunami hazard areas. The remaining Areas (A, E, I, and F) have some degree of coastal or fluvial proximity and thus are considered to have a moderate potential for adverse impacts from all alternatives, with a growing magnitude of impact with increasing development. - Areas B, C, and D are nearly entirely within tsunami hazard areas, and thus all alternatives, including No Action, are considered to have high potential for adverse impacts, with a growing magnitude of impact with increasing development.

NEHRP = National Earthquake Hazards Reduction Program

Mineral Resource Conflicts

Potential growth Area H is the only development area with more than a low potential for conflicts with mineral resources. No other areas contain active surface mine permits or mapped mining districts, so Alternatives 1 through 3 have a low potential for adverse effects in all areas except Area H.

Impacts by Alternative

Alternative 1: No Action

Alternative 1 would result in the least amount of growth and development. Because development would be limited, the likelihood of disturbance in areas with geologic or soil-related constraints would be reduced. With the lowest overall development levels, this alternative also presents the lowest potential for adverse impacts on geologically hazardous areas and resource lands. Areas H, J, and G would experience minimal change, and no substantial interaction with mining operations or resource lands is anticipated. Given the minimal growth expected, the potential for conflicts with mineral resource areas and surface mining operations would likewise remain low.

Alternative 2: Moderate Growth

Alternative 2 anticipates more development than Alternative 1 and would therefore present a moderately higher potential for impacts on earth-related hazard areas and resource lands. Areas H, J, and G have a low potential for impacts. Moderate increases in development would elevate the likelihood of impacts in hazard areas compared to Alternative 1, though overall risk would remain limited.

Potential conflicts may arise where mineral resources associated with permitted mining sites extend into adjacent planning areas. Although several mining permits occur near Areas B, I, E, F, J, and G, these, primarily surface sand and gravel operations, do not present direct development hazards; however, resource-use conflicts could be moderate in these locations. Area H contains four active surface mining permits, and while development could increase the potential for conflicts in this area, mining related hazards remain low due to the surface extraction nature of these operations.

Alternative 3: High Growth

Alternative 3 would accommodate the greatest amount of growth and therefore poses the highest potential for impacts on earth-related hazard areas and resource lands. Areas H, J, and G would continue to have a low potential for direct impacts. Increased development levels would heighten the potential for impacts in geologically constrained areas relative to Alternatives 1 and 2.

Similar to Alternative 2, mineral resources associated with mining permits near Areas B, I, E, F, J, and G could present moderate resource-use conflicts if development extends into these locations, with this potential increasing slightly under Alternative 3 due to higher overall growth. Area H, which contains multiple active surface mines, may experience a moderate increase in

conflict potential; however, the surface extraction nature of these operations keeps associated hazard risks low under all alternatives.

3.1.3 Avoidance, Minimization, and Mitigation

The proposed alternatives incorporate features and regulatory frameworks intended to minimize development-related risks in geologically hazardous areas. Together, existing regulations and potential future mitigation measures help reduce adverse impacts to public safety and the natural environment.

Incorporated Plan Features

Higher-intensity development is directed to locations outside of geologically hazardous areas. Existing policies reinforce critical areas regulations by limiting development in areas subject to geological hazards, helping to reduce risk to public safety and the natural environment.

Applicable Regulations and Commitments

Various regulations, such as GHCC 18.06, work to mitigate development in critical areas or hazardous areas. If these regulations are appropriately adhered to, few impacts will be observed under the proposed alternatives. For natural hazards and public safety concerns like seismic activity and tsunamis, it is recommended to avoid building or to build with seismic considerations in mind in areas with high risk.

Other Potential Mitigation Measures

Other measures not included in the present regulatory framework may help to further mitigate the potential for adverse impacts of the proposed alternatives. Mitigation measures such as warning signals, development and signage along evacuation routes, and even tsunami towers built to offer refuge during a tsunami would help to mitigate risk. As science and engineering continue to advance, the potential for adverse impacts may decline in the future.

3.1.4 Significant Unavoidable Adverse Impacts

Development can have an adverse impact on natural landforms by altering topography, changing surface water flow patterns, changing groundwater hydrology, and more. Over time, these activities may create additional or unforeseen earth-related hazards. Alteration to topography and increases in impervious surfaces would change surface and groundwater flow patterns and volumes resulting in increased erosion and water runoff, decreased groundwater recharge, and potentially reducing water quality which cannot be mitigated and is unavoidable.

3.2 Air Quality and Greenhouse Gases

This section describes the current air quality conditions in the county, existing regulations and policies that govern allowable air pollutant emissions, and existing regulations and policies that have been developed to reduce greenhouse gas (GHG) emissions. Impacts of the alternatives are analyzed at a qualitative level and measures to avoid, minimize, or mitigate such impacts are identified. For the purposes of this analysis, the study area consists of the 10 areas of potential growth in the county.

3.2.1 Affected Environment

Regulatory Setting

Air quality in the county is regulated under a combined framework of federal, state, and local regulations. The primary regulatory jurisdiction is held by the Olympic Region Clean Air Agency (ORCAA), which enforces the Washington Clean Air Act and administers federal, state, and local air quality requirements. ORCAA is one of seven local clean air agencies under the Washington Clean Air Act (RCW Chapter 70A.15) and implements air pollution control rules across six counties, including Grays Harbor County. ORCAA implements and enforces regulations derived from the federal Clean Air Act, U.S. Environmental Protection Agency (EPA) regulations, and WAC requirements for air pollution sources.

Key state regulations applicable to air quality include the following:

- WAC 173-400. General Regulations for Air Pollution Sources
- WAC 173-401. Operating Permit (Title V) Regulation
- WAC 173-425. Outdoor Burning
- WAC 173-460. Controls for New Sources of Toxic Air Pollutants
- WAC 173-433. Solid Fuel Burning Devices (wood-heating appliances)

These WAC chapters are administered in coordination with ORCAA and Ecology. ORCAA regulations constitute the primary air quality control authority in the county and establish emission standards, enforcement procedures, permitting requirements, and restrictions on outdoor burning and wood-heating devices.

Ambient Air Quality

Ambient air quality in the county is monitored to ensure compliance with federal National Ambient Air Quality Standards (NAAQS) established under the federal Clean Air Act.

ORCAA maintains the regional air monitoring network and reports conditions daily, including burn ban status, pollutant measurements, and air quality advisories. ORCAA's mission includes maintaining air quality levels that protect human health and welfare across its jurisdiction, including the county.

Air quality conditions in the larger region are influenced by seasonal high-pressure systems that can lead to stagnation and increased sensitivity to emissions from residential burning, industrial activity, and mobile sources. ORCAA responds to impaired air quality episodes by issuing burn restrictions and implementing monitoring protocols consistent with federal requirements (40 *Code of Federal Regulations* [CFR] Parts 53 and 58).

Criteria Air Pollutants

The six criteria pollutants are carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter less than 2.5 micrometers in aerodynamic diameter (PM_{2.5}) and less than 10 micrometers in aerodynamic diameter (PM₁₀), and sulfur dioxide (SO₂). PM_{2.5} is the primary pollutant of concern in the county and the main pollutant detected in local air quality monitoring data. PM_{2.5} primarily comes from the combustion of gasoline, diesel, oil, wood, and other fossil fuels, along with industrial processes, wildfires, and atmospheric chemical reactions involving gases such as sulfur dioxide, nitrogen oxides, and ammonia.

Greenhouse Gases

Under the Washington Clean Air Act, ORCAA implements New Source Review and other stationary-source permitting for facilities in its six-county jurisdiction including Grays Harbor County, covering sources that emit GHGs such as carbon dioxide, methane, and nitrous oxide. Separately, Ecology administers the statewide Climate Commitment Act (RCW 70A.65) cap-and-invest program and the GHG reporting rule (WAC 173-441), which establish economy-wide compliance obligations, allowance auctions, and third-party-verified GHG reporting for covered facilities, suppliers, and electric power entities.

Existing Conditions

Typical sources of air pollution in the county include vehicular traffic along major roadways and within urbanized and rural communities, commercial and industrial operations, and emissions from residential wood-burning devices. Although a variety of emission sources are present, on-road motor vehicles are the predominant contributor to most criteria air pollutants, particularly carbon monoxide, volatile organic compounds, and nitrogen dioxide.

Additional emissions result from stationary sources associated with commercial and industrial land uses, as well as from space-heating systems, including natural gas and diesel equipment. Residential wood-burning appliances also contribute to background air quality conditions, particularly during colder months. The county is currently designated as being in attainment of NAAQS for all criteria pollutants. While attainment status does not preclude localized or temporary air quality impacts, it indicates that monitored pollutant concentrations meet federal health-based standards and that local and state air programs administered through ORCAA and Ecology are maintaining compliance with those standards.

Emissions

ORCAA oversees and registers facilities that generate air emissions to ensure compliance with applicable air quality laws and standards (ORCAA n.d.). Registered facilities provide air-related information and participate in routine inspections, allowing ORCAA to confirm compliance and maintain a regional emissions inventory. Facilities classified as “major sources” (for example, large industrial operations, power plants, and refineries) are required to obtain an air operating permit, which consolidates applicable air quality limits, monitoring and reporting into a single document. Table 3.2-1 identifies the major permitted emitters within Grays Harbor County.

Table 3.2-1. Large Emitters with Air-Quality Permits County-wide

Facility Name	Permit Type	Location	Notes
Sierra Pacific Industries	Air Operating Permit	301 Hagara Street Aberdeen 98520	This is an existing facility that manufactures kiln-dried lumber and wood residual byproducts from the milling process.
Grays Harbor Energy	Air Operating Permit	401 Keys Road Elma 98541-9149	This is a power generation facility with two combustion gas turbines.
Westport LLC	Air Operating Permit	1807 North Nyhus Street Westport 98595	Westport LLC manufactures luxury yachts using fiberglass-reinforced plastics.
Simpson Door Company	Air Operating Permit	400 Simpson Avenue McCleary 98557	This is a wood door manufacturing plant.
Cosmo Specialty Fibers	Air Operating Permit	1701 1st Street Cosmopolis 98537	This is a sulfite pulp mill that uses virgin hemlock to make about 550 tons of dissolving pulp (acetate, viscose, and ether grades) each day.

Source: Ecology n.d.-a

Climate Change Vulnerability

The county faces significant climate-related vulnerabilities driven by coastal erosion, flooding, sea-level rise, and increasing storm intensity. Shoreline instability is already affecting Ocean Shores and Westport, where erosion threatens hundreds of millions of dollars in residential property, public infrastructure, and critical utilities, including wastewater systems, pump stations, and road networks. Future climate conditions are projected to intensify these hazards, compounding existing risks from storm surge, dune loss, and sediment depletion.

3.2.2 Potentially Significant Impacts

The proposed Comprehensive Plan would not result in direct changes to the physical and human environment. However, the plan provides a policy framework that is intended to guide future development and any impacts on the environment would be indirect. This section summarizes the impact analyses based on the amount of planned growth and areas where growth will occur.

Methods of Analysis

Consistent with a planning-level approach, this assessment uses a qualitative methodology to evaluate potential changes in air quality and GHG emissions associated with implementation of the proposed Comprehensive Plan. Because the plan does not approve specific development projects, the analysis does not quantify emissions. Instead, the analysis considers whether projected growth patterns and associated transportation activity could affect regional or local air quality conditions or conflict with applicable regulatory standards and lead to significant adverse effects on air quality and GHG emissions.

This evaluation considers how land use and transportation changes under each alternative may influence emissions and contribute to localized or regional air quality concerns. Table 2-1 (Chapter 2, Alternatives) summarizes the anticipated land use changes and development acreage across 10 potential growth areas, along with the corresponding land use designations under the No Action, Moderate Growth, and High Growth alternatives.

In most of the identified areas of potential growth, a small amount of retail development, generally between 10 and 20 acres, is included under all alternatives. Where noted, these retail components are primarily designated as Rural Development. In addition, Area J is predesignated for industrial, manufacturing, and technology business park uses within the Satsop Development Park. It includes 100,000 square feet of industrial/business facilities regardless of the growth scenario.

Impacts Common to All Alternatives

Growth influences air quality primarily because it increases the number and intensity of activities that produce air pollutants. As areas develop, traffic volumes typically rise, leading to higher emissions of pollutants such as nitrogen oxides, carbon monoxide, and particulate matter from vehicles.

Construction activities also generate dust and exhaust emissions. In addition, expanded Residential, Commercial, and Industrial development often increases energy use, heating, and other combustion-based activities that contribute to overall emissions. As a result, larger or more intensive development scenarios tend to create greater potential for air quality degradation compared to lower-growth alternatives.

Growth influences climate change resiliency because expanding populations and development increase the activities that generate GHG emissions, including energy use, transportation, construction, and industrial production. As emissions rise, they contribute to global warming, which in turn exacerbates climate-related vulnerabilities.

Changes in Emissions

Proposed changes in land use classifications could influence future development, and those potential effects would apply to all three alternatives. Regardless of the alternative, population within the study area is expected to increase alongside expansion of commercial and industrial development; as a result, air pollutant emissions generated within the study area are anticipated to rise. Regional vehicle miles traveled by residents and workers are also expected to increase, leading to corresponding increases in tailpipe emissions from motor vehicles.

Construction Air Quality Effects

During construction, fugitive dust from excavation and grading could temporarily increase ambient particulate matter and tailpipe emissions from heavy construction equipment and vehicles could temporarily degrade air quality near construction sites. These temporary impacts would be minimized through standard mitigation measures, including best management practices for dust control, equipment emission standards, and construction-phase odor management.

Operational Emissions From Heating and Industrial Activity

Under all three alternatives, emissions would be generated by combustion of natural gas, fuel oil, and propane combustion used for heating new and existing dwellings and retail/commercial businesses. Because Residential development may include installing fireplaces or woodstoves, there is a potential for air quality impacts from burning wood, subject to state and local rules (e.g., solid-fuel burning device requirements).

Commercial and Industrial operations would also generate emission under all alternatives. Major industrial facilities could expand and increase their contribution to regional air pollutants and GHG emissions. Large stationary pollutant-emitting commercial and industrial facilities must be registered and permitted with ORCAA, and applicants may be required to conduct an air quality assessment to disclose the proposed emissions.

At the Satsop Development Park (Area J), the level and type of development is assumed to remain constant across all three alternatives because each has the potential to influence local air quality due to industrial and business park activities and the scale and type of development do not vary among the scenarios. Any associated effects at this site would be comparable under the proposed alternatives and would not be significant.

Climate Change Resiliency

Warming temperatures accelerate sea-level rise, increasing the risk of coastal erosion and flooding, particularly in low-lying or shoreland communities. Development in these areas can further heighten exposure by accommodating more people, infrastructure, and property in locations susceptible to storm surge, shoreline retreat, and extreme weather events. As a result, higher growth scenarios increase emissions but also intensify the physical and social risks associated with climate change impacts. Key resilience initiatives in the county focus on coastal hazards, including enhanced flood management, and erosion control (Ecology 2017).

Areas A, B, and C are more susceptible to coastal erosion and flooding due to their proximity to the shoreline, and future development in these locations should prioritize climate-resilient design and infrastructure to reduce long-term vulnerability.

Impacts by Alternative

Alternative 1: No Action

This alternative would result in the least amount of growth. Because air quality impacts generally increase with the scale of development, this option presents the lowest potential for adverse effects on air quality. This alternative would result in the least amount of growth and presents the lowest potential for adverse effects on climate change resiliency.

Alternative 2: Moderate Growth

This alternative anticipates more development than the No Action Alternative. As a result, the potential for impacts on air quality and climate change resiliency would be moderately higher.

Alternative 3: High Growth

This alternative expects the greatest amount of development. Accordingly, it would pose the highest potential for impacts on air quality and climate change resiliency.

3.2.3 Avoidance, Minimization, and Mitigation

This section summarizes avoidance, minimization, and potential mitigation measures to help minimize air quality impacts.

Incorporated Plan Features

Temporary, localized dust and odor impacts could occur during construction activities. GHCC Title 17 – Zoning requires the proposed use and construction-related activities in some zones to minimize or avoid air emissions such as noxious fumes, odors, and dust.

Applicable Regulations and Commitments

Three agencies have jurisdiction over ambient air quality in the county: EPA, Ecology, and ORCAA. ORCAA permits and regulates the allowable emissions from industrial and other regulated facilities and activities. Industrial emissions are subject to applicable air quality permitting requirements and regulatory review. Future development potentially impacting air quality would be subject to project-specific environmental review by the County and ORCAA, with oversight by Ecology.

Other Potential Mitigation Measures

In addition to best management practices, other potential mitigation measures include the following:

- The County may require all construction contractors to implement air quality control plans for construction activities in the study area.
- The County may adopt regulations to control air emissions such as noxious fumes, odors and dust.
- Future development should prioritize climate-resilient design and infrastructure to reduce long-term vulnerability.

3.2.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on regional or local air quality are anticipated. The primary contributor to air quality and GHG emissions associated with future growth would be increased vehicle travel and transportation activity.

The regulations, incorporated plan features, and other potential mitigation measures are adequate to mitigate any adverse impacts anticipated to occur as a result of the county growth increasing. With the application of existing regulatory requirements and incorporated project design features, potential air quality impacts associated with projected county growth are expected to be adequately mitigated.

3.3 Water Resources

This section analyzes the proposed action within the regulatory context of the affected environment for water resources in the county. The potential impacts on water resources are assessed for the proposed alternatives, and potential mitigation measures that could be employed to avoid or minimize these impacts are discussed. The water resources described in this section include groundwater and surface water with an additional stormwater component.

The study area is defined by the County's jurisdictional boundaries, with more intensive review focused on the potential growth areas.

3.3.1 Affected Environment

Regulatory Setting

Watershed-scale management is organized through Water Resource Inventory Areas (WRIA), which establish the boundaries of major watersheds and sub-basins used for surface water planning, water-quality assessments, and permitting. These watershed units are central to Ecology's planning and water-resource management programs. Additional discussion around groundwater, surface water, and stormwater regulations and policies is provided.

Groundwater

Washington's Groundwater Quality Standards (WAC 173-200) require maintaining the highest practicable groundwater quality and regulating any activity with potential to contaminate aquifers. These standards apply statewide and protect beneficial uses such as drinking-water supply. The County implements additional groundwater protections through Critical Aquifer Recharge Area (CARA) regulations under the GMA, which requires the identification and protection of aquifer systems, recharge zones, and hydrogeologic conditions that support potable groundwater supplies.

The County distinguishes between CARA Type A and Type B areas (GHCC 18.06.630). Type A denotes higher-vulnerability recharge with stricter protective measures. Type B denotes lower-to-moderate vulnerability with standard protective measures. This framework implements the state requirement to classify recharge areas by vulnerability based on hydrogeologic susceptibility and contaminant-loading potential.

Drinking Water Supply

Public drinking water systems are regulated by the Washington State Department of Health (DOH) as Group A, which includes ≥ 15 service connections or ≥ 25 people ≥ 60 days/year (WAC 246-290) and Group B, which includes < 15 connections and < 25 people/day (WAC 246-292). Group A systems must meet planning, source approval, monitoring, and source-water protection requirements. Group B systems follow state and, where delegated, local standards for design and basic water quality protection.

For source-specific protection, DOH administers Source Water Protection requirements for all Group A water systems, including Wellhead Protection Areas (WHPA; WAC 246-290-135). The Wellhead Protection Program Guidance (DOH 331-018) highlights common risks to drinking

water sources, including onsite septic systems, agricultural and urban chemicals, and naturally occurring contaminants. For Group A public water systems, DOH requires wellhead protection programs that delineate time-of-travel zones, inventory potential contaminant sources, and implement management measures to protect drinking water wells. For more information on drinking water purveyors and water service demand, refer to Section 3.9, Public Services and Utilities.

Surface Water

Surface water is protected by a number of different authorities, depending on the type, size, and use. This section discusses the regulatory environment for each of the major water types of surface water.

Streams and Waterbodies

Streams and waterbodies in unincorporated areas of the county are regulated by GHCC 18.06 (Article VII, Fish and Wildlife Habitat Conservations Areas), as well as applicable state and federal regulations. The CAPO establishes riparian buffers measured from the ordinary high water mark (OHWM), and a 10-foot building setback from the buffer edge, with buffer width based on stream type/designation (e.g., Type S/Type F fish-bearing; Type Np non-fish-bearing perennial; Type Ns non-fish-bearing seasonal). Standard buffers include: 150 feet for salmonid-bearing and other fish-bearing streams (Types S and F), 60 feet for non-fish-bearing perennial/undifferentiated streams (Type Np/N), and 50 feet for non-fish-bearing seasonal streams (Types Ns).

Floodplains

Floodplains in the county are regulated under the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP), which provides the basis for designating Special Flood Hazard Areas (SFHA) on Flood Insurance Rate Maps and establishes floodplain management standards. Local development regulations implement these federal requirements by restricting or conditioning development within mapped flood hazard areas to protect public safety, reduce flood damage, and preserve the natural flood-storage and conveyance functions.

The County regulates frequently flooded areas under GHCC 18.06 (Article V, Frequently Flooded Areas), and all development within the SFHA requires a Floodplain Development Permit. Consistent with RCW 86.16 and WAC 365-190-110, the purpose of these regulations is to allow reasonable use of property while maintaining floodplain functions that reduce flood risk and protect water quality, habitat, and natural hydrologic processes.

Wetlands

The County regulates wetlands under GHCC 18.06 Article III, Wetlands, which protects sensitive natural resources consistent with the GMA and best available science. Wetland regulations are intended to avoid or minimize impacts from land use while preserving key hydrologic, ecological, and water-quality functions, such as habitat provision, groundwater recharge and discharge, streamflow support, shoreline stabilization, floodwater storage, and pollutant filtration. To maintain these functions, the County limits activities allowed in wetlands and requires wetland buffers that vary by wetland Category and Habitat Score, ranging from 40 to 300 feet, plus a 10-foot building setback. Buffers help protect wetland functions by reducing erosion, shading

loss, and pollutant transport from adjacent development. However, wetlands meeting specific criteria listed in the CAPO may be impacted or filled as long as proper mitigation efforts are undertaken.

Surface Water Quality

Surface water protection in Washington is governed by the federal Clean Water Act and the State Surface Water Quality Standards (WAC 173-201A), administered by Ecology. These standards define designated uses for rivers, lakes, wetlands, and marine waters, and establish numeric and narrative criteria, together forming the regulatory basis for anti-degradation policy preventing pollution and maintaining water quality statewide. The Water Quality Assessment/303(d) List identifies Category 5 “impaired” waters that do not meet standards and prioritizes them for cleanup planning (total maximum daily loads [TMDLs] or alternatives); results are published in Ecology’s online database and atlas and approved by EPA.

Building on this statewide framework, the County applies resource specific regulations that translate water quality standards and 303(d) priorities into on the ground protections during planning and permitting. Wetlands and floodplains are regulated to preserve water quality, along with hydrologic function, habitat, and public safety.

Stormwater

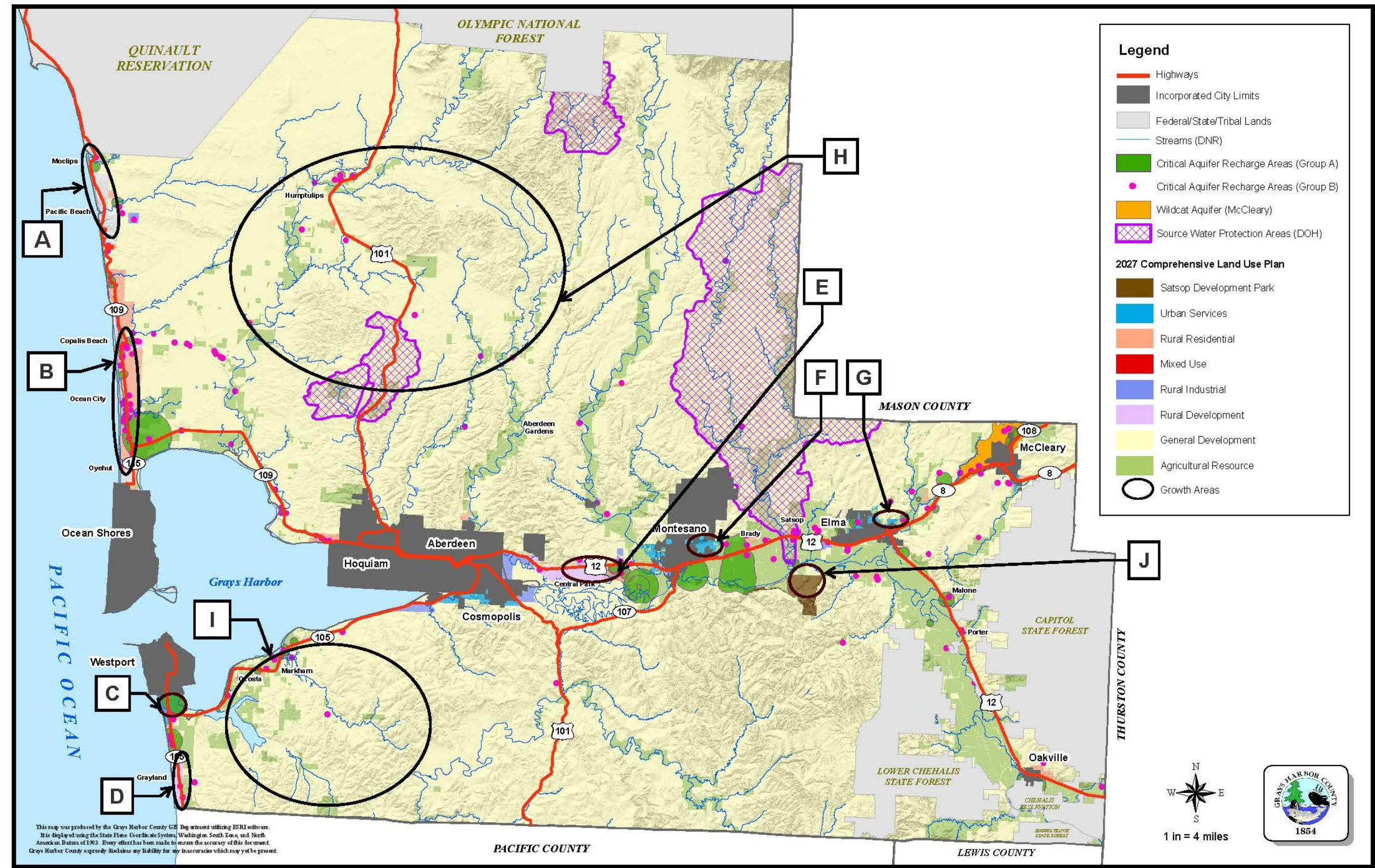
In unincorporated county, stormwater management for planning, design, and permitting relies on Ecology’s SWMMWW. The manual serves as the primary technical basis for minimum requirements, best management practices (BMP), and site design, flow control, and treatment guidance. Most construction projects that disturb 1 acre or more must obtain coverage under Ecology’s National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit, prepare and implement a construction stormwater pollution prevention plan (SWPPP), and conduct required monitoring/reporting.

Existing Conditions

Groundwater

Aquifers that supply public and private wells commonly occur in unconsolidated sand and gravel formations (alluvial valleys or glacial outwash), especially in eastern uplands near McCleary and along Chehalis River valley alluvium. In contrast, bedrock units (older sedimentary or volcanic rocks) can yield water where fractured or sufficiently weathered. Basin-level groundwater/WRIA mapping for the Lower Chehalis (WRIA 22) and Upper Chehalis (WRIA 23) are shown on Figure 3.3-1. Locations and extents of major aquifers in the county are mapped in accordance with WAC 365-190-100 and Ecology’s 2021 CARA Guidance.

Figure 3.3-1. Groundwater Resources in Unincorporated Grays Harbor County



County and state mapping indicates that recharge is concentrated across multiple permeable upland and outwash areas in the unincorporated county, with groundwater generally flowing downgradient into major river valleys and discharging to the Chehalis River system, wetlands, and coastal waters of Grays Harbor. Within mapped wellhead areas, such as the Wildcat Creek Aquifer near McCleary, time-of-travel (10- and 50-year) delineations illustrate this gradient from upland recharge toward municipal wellfields and receiving waters, and similar patterns are used to guide protection in other designated CARA locations county-wide.

Drinking Water Supply

Drinking water in unincorporated areas of the county is primarily sourced from groundwater, but four surface water sources also exist. The groundwater sources consist of a mix of Group A community/non-community systems (municipalities, special-purpose districts, and County-operated systems), smaller Group B systems, and individual private wells. The DOH Source Water Assessment Program (SWAP) mapping tool can be used to identify Group A service areas, Group B locations (where available), groundwater WHPAs (1-, 5-, and 10-year time-of-travel), and surface-water supply watersheds. Statewide WHPA layers (e.g., 10-year time-of-travel) are also published for geographic information system (GIS) overlay to support plan-level screening of potential growth areas. All growth areas except Areas H and I are presently being supplied by public water supply systems that will be used for future growth.

Active groundwater supply sources tend to be clustered near the coast, including public systems like Pacific Beach/Moclips and Hogan's Corner, or near rivers and streams in the county. Surface water sources include the Aberdeen Reservoir (Lake Aberdeen) on the Wishkah River, which supplies drinking water to the city of Aberdeen and some unincorporated areas. DOH notes that private (individual) wells are common in rural areas outside Group A/B service and generally excluded from ongoing public water system compliance; available data and SWAP/USGS resources can be used to characterize domestic reliance and hydrogeologic context where needed for land-use planning.

The Wildcat Creek Aquifer is the primary drinking water source to the city of McCleary and it also supports numerous private wells in the surrounding unincorporated area. The Wildcat Creek Aquifer and WHPA is specifically identified for protection (GHCC 18.06.420) as a CARA (Group A) with defined 10-year and 50-year protection zones. It is a locally significant resource requiring protection under state CARA guidelines (WAC 365-190-100) because groundwater in this portion of the county occurs in porous glacial outwash deposits, recharge areas are sensitive to land-use changes that could alter infiltration or introduce contaminants.

Surface Water

Surface waterbodies (i.e., major rivers, streams, lakes, wetlands, and estuaries) are mapped and monitored through state and federal programs, including Ecology's water-quality standards program and EPA's approved water-quality criteria for Washington. These datasets identify the extent of surface water features and support Clean Water Act regulatory functions such as water quality assessments and permit limits.

Streams and Waterbodies

Surface water flow in the unincorporated areas of the county generally follow watershed topography, with runoff moving from uplands through tributary streams into larger rivers and coastal estuaries (Figure 3.3-2). Wetlands and floodplains within these watersheds act as natural storage and filtration. Under the GMA, these features are regulated as critical areas to help maintain natural drainage patterns, while reducing erosion, flood risk, and pollutant transport to receiving waters. Notable streams and waterbodies in the county are summarized in Table 3.3-1. Waterbodies include both natural lakes (Lake Quinault) and constructed reservoirs (Wynoochee Lake, Lake Aberdeen, and Lake Sylvia).

Floodplains

Floodplains in the county occur along major rivers, streams, and coastal lowlands and are subject to inundation during high-flow and storm events, particularly in winter when high tides and strong winds from coastal storms can produce storm surges and coastal flooding (Figure 3.3-3). These floodplain areas play a key role in natural flood management by storing water, reducing flow velocities and erosion, settling sediments, facilitating groundwater recharge or discharge, recruiting large woody material, and supporting riparian habitat. Flooding in the county is most common during winter storm cycles, when rainfall, snowmelt, and coastal surge events coincide to elevate water levels across riverine and coastal floodplains.

Wetlands

Wetlands are widespread across unincorporated areas of the county, occurring in estuarine and tidal areas of Grays Harbor, riverine floodplains and surge plains of major watersheds (e.g., Chehalis, Humptulips, Wishkah, Hoquiam, Elk, and Johns), and palustrine depressional and upland settings formed in alluvial or glacial outwash landscapes. These wetlands provide key functions relevant to land use planning, including floodwater storage, baseflow support, sediment and nutrient processing, shoreline stabilization, and high-value habitat (including tidally influenced freshwater wetlands and Sitka spruce swamps) (Ecology n.d.-b, Office of Chehalis Basin 2019).

Areas that overlap with potential growth therefore require careful avoidance, buffer placement, and mitigation sequencing. State resources such as the wetland rating system, delineation guidance, mapping tools, and the Washington Wetland Program Plan, support consistent evaluation of wetland extent and function and help align local protection and restoration with broader watershed-scale priorities (Ecology 2023, n.d.-b).

Water Quality

In the Chehalis/Grays Harbor watershed, Ecology has issued multiple TMDLs and basin-wide implementation plans addressing dissolved oxygen, temperature, fecal coliform bacteria, and related pollutants with coordination through the Chehalis Basin Partnership and other stakeholders. According to the current EPA-approved Water Quality Assessment and Ecology's searchable 303(d) list, multiple stream reaches in unincorporated areas within the Chehalis/Grays Harbor basin are listed as Category 5 (impaired). Ecology's Chehalis/Grays Harbor Detailed Implementation Plan consolidates TMDL actions for 114 impaired segments across several reports and studies, each with load allocations and implementation actions to improve compliance with WAC 173-201A criteria.

Figure 3.3-2. Surface Water Resources in Unincorporated Grays Harbor County

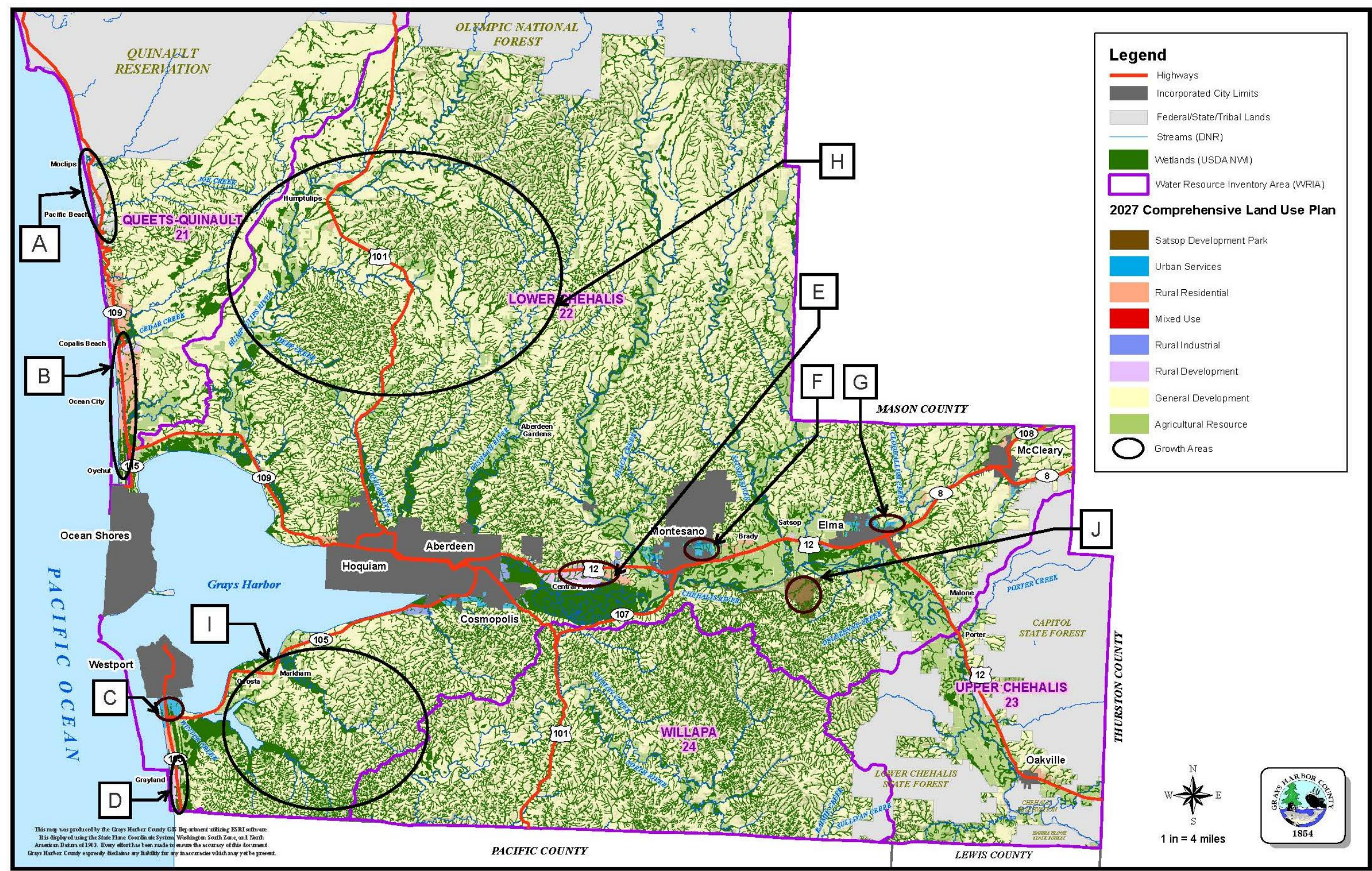


Figure 3.3-3. Flood Hazards in Unincorporated Grays Harbor County

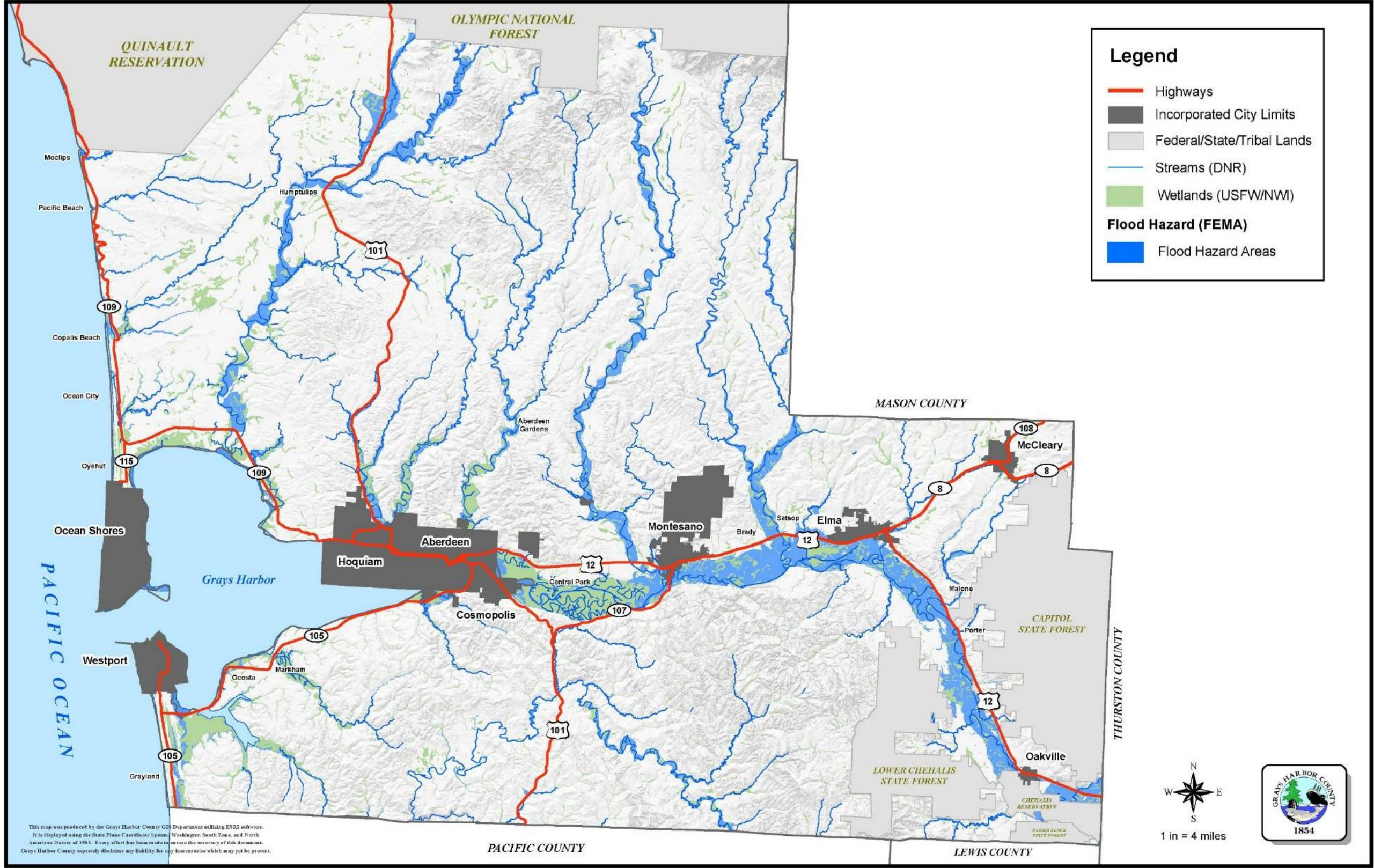


Table 3.3-1. Significant Rivers, Streams, and Waterbodies in Grays Harbor County

Name	Proximal Growth Area	Area (square miles) ^[a]	Description
<i>Rivers and Streams</i>			
Chehalis River	E, F, G	3400	River flows through multiple counties east to west, and into the Grays Harbor estuary.
Queets River	-	449	River initiates in the Olympic Mountains, flowing northeast to southwest into the ocean at the unincorporated Queets community.
Quinault River	-	435	River initiates in the Olympic Mountains, flowing northeast to southwest through Lake Quinault and into the ocean near Cape Elizabeth.
Satsop River	F	302	River flows north to south into the Chehalis River east of Montesano.
Humtulpis River	H	276	River flows southward from the Olympic Mountains.
Wynoochee River	-	196	River flows north to south, eventually meeting Chehalis River.
Wishkah River	H	103	River flows north to south through Aberdeen and into Chehalis River.
Hoquium River	H	98	River flows north to south into Grays Harbor.
Cloquallum Creek	G	68	Stream flows south and southwest near Elma and into Chehalis River.
Copalis River	H	39	River flows north to southwest and into the ocean at Copalis Beach north of Grays Harbor.
Moclips River	A	36	River flows northeast to southwest and into the ocean north of Pacific Beach.
Johns River	I	31	River flows southeast to northwest and into the south end of Grays Harbor.
Joe Creek	A	23	Stream flows east to west through Pacific Beach and into the ocean.
Elk River	I	18	River flows south to north and northwest into the South Bay of Grays Harbor.
<i>Lakes</i>			
Lake Quinault	-	5.5	Lake Quinault is the largest waterbody in the county and is located in the Quinault River watershed.
Wynoochee Lake	-	1.6	Wynoochee Lake is located in the upper Wynoochee River watershed.
Lake Aberdeen	E	0.1	Lake Aberdeen is located to the east of Aberdeen in the Wynoochee River watershed.
Lake Sylvia	F	0.04	Lake Sylvia is located north of Montesano in the Wynoochee River watershed.

^[a] Areas derived from StreamStats (USGS 2019).

Table 3.3-2 provides a summary of areas impacted by watercourse/waterbody. Basin partners, including the Chehalis Basin Partnership, regularly report summer temperature and dissolved oxygen concerns and continued bacteria-reduction work, with status updates and monitoring reflected in Chehalis Basin Partnership summaries and Ecology follow-up materials.

Table 3.3-2. Category 5 Listed Waters and Mediums in Grays Harbor County

Name of Water	Pollution Parameters
Black Creek	Temperature
Cedar Creek	Dissolved Oxygen
Chehalis River	Temperature, Mercury, PCBs, Dissolved Oxygen, pH
Cloquallum Creek	Dissolved Oxygen
Deep Creek	Temperature
Delezenne Creek	Dissolved Oxygen
Grays Harbor (Outer)	Bacteria – Fecal Coliform, Enterococci, Dieldrin
Grays Harbor (Inner)	Mercury
Grays Harbor County Ditch No. 1	Diazinon, Water Column Bioassay, 4,4'-DDE, 4,4'-DDD, Chlopyrifos, DDT (And Metabolites), Dissolved Oxygen
Hoquiam River	Dissolved Oxygen, Bacteria – Fecal Coliform
Humtulsips River	Dissolved Oxygen
Joe Creek	Temperature
North River	Temperature
Pacific Ocean (WRIA 21 & 22)	Bacteria - Fecal Coliform, Enterococci
Porter Creek	Dissolved Oxygen, Temperature
Raimie Creek	pH
Raimie Creek, Right Fork	pH
Salmon Creek	Temperature
Salmon Creek, Upper	Temperature
Salmon River	Temperature
Salmon River, North Fork	Temperature
Satsop River	Dissolved Oxygen
Sullivan Creek	Temperature
Unnamed Creek (to Bitter Creek)	Temperature
Unnamed Creek (to North River)	Temperature
Unnamed Creek (to Pacific Ocean (WRIA 21))	Temperature
Winter Creek	Dissolved Oxygen

Name of Water	Pollution Parameters
Satsop River	Dissolved Oxygen
Wishkah River	Bacteria – Fecal Coliform, Temperature
Wishkah River, East Fork	Temperature

Source: Washington State Department of Ecology 303(d)/Category 5 Water Quality Assessment Database.

DDD = dichlorodiphenyldichloroethane

DDE = dichlorodiphenyldichloroethylene

DDT = dichlorodiphenyltrichloroethane

PCBs = polychlorinated biphenyls

Stormwater

Stormwater systems in the county are designed to collect runoff from impervious surfaces and convey it to a receiving water, typically a stream, river, or waterbody, and occasionally to groundwater. Larger stormwater systems (Aberdeen) and new or updated portions of state highway typically require stormwater management measures, including detention and water quality treatment, and new subdivisions are required to have adequate provisions for routing stormwater without damage to watercourses or neighboring properties, but older and smaller systems often have fewer regulatory requirements and lack such facilities.

New subdivision and development projects must also demonstrate adequate drainage provisions to route stormwater without causing erosion, flooding, or offsite impacts, consistent with local implementation of the SWMMWW and stormwater site plan requirements. Older or smaller stormwater systems, particularly those constructed prior to modern NPDES and SWMMWW standards, often lack detention, treatment, or other engineered controls because such measures were not required under earlier regulations and may still fall below current threshold triggers.

3.3.2 Potentially Significant Impacts

This section describes the potentially significant impact associated with water resources under the proposed alternatives, including:

- Changes in surface and groundwater hydrology
- Increased stormwater runoff and stormwater management needs
- Increased contaminants in surface and groundwater
- Increased demand for existing water supply systems

Methods of Analysis

This analysis uses a combination of desktop review and GIS-based spatial evaluation to assess how the alternatives may affect surface water and groundwater resources. Existing state and federal datasets were reviewed to identify sensitive water features within each growth area. Potential impacts were then qualitatively evaluated based on the proximity, type, and vulnerability of surface water and groundwater resources.

Impacts Common to All Alternatives

All alternatives have the potential for affecting water resources, with the potential for impact generally increasing with the level of development. Existing and future development will likely increase impervious surface areas. If not managed properly, increased impervious surface areas can reduce infiltration and groundwater recharge, which is the predominant water supply for the county. It may also lead to increased runoff to streams, resulting in higher peak flows, increased flooding potential, and increased erosion risk (discussed in Section 3.1, Earth Resources). Runoff from impervious surfaces may also carry pollutants that can reduce water quality of both surface and subsurface water. Wetlands hydrology is driven by surface or shallow subsurface water, and therefore may be impacted by development under the proposed alternatives.

Groundwater and Drinking Water Supply

Groundwater resources are typically located in areas of glacial outwash or alluvium, and those resources actively used for water supply tend to be in or near the areas that have been developed. Existing and future development will likely increase impervious surface areas, which can result in decreased recharge and increased potential for pollution. Additionally, because groundwater is one of the primary water sources for the county, increased development will increase the demand for groundwater. All three alternatives have a moderate to high potential to adversely affect groundwater resources, with the potential increasing as development increases.

Drinking water is a necessary component of development for all alternatives. Drinking water resources may also be adversely affected by increases in contaminant loads from stormwater with increased development.

Rivers, Streams, and Waterbodies

All growth areas include or are in close proximity to watercourses or waterbodies. Existing and future development can affect waterbodies and their buffers directly with construction activities such as grading and building; or indirectly by changing hydrology with increases to impervious surfaces, stormwater discharges, and increased pollutant loads. All alternatives have a moderate to high potential to adversely affect watercourses and waterbodies, with the potential increasing with increased levels of development.

Floodplains

For all alternatives, new development within floodplains can encroach on flood storage and adjustment space, tending to simplify channel forms over time, degrade habitat and biodiversity, reduce functional resilience, and diminish public enjoyment. Floodplains potentially affected by development were identified using FEMA National Flood Hazard mapping. All growth areas except Area J include FEMA-designated floodplain (Zone A) along major river and stream valley floors, where development would face increased infrastructure risk. Coastal growth areas (Areas A, B, C, and D) also include high-risk coastal flood zones that pose similar risks.

Even where FEMA floodplains are not mapped, flood risk and channel dynamics may still be present. Streams and rivers can experience channel migration or avulsion (wholesale alignment shifts). Large floods or debris flow events can reorganize flow, sediment, and large woody material, affecting adjacent infrastructure (refer to Section 3.1, Earth Resources).

Wetlands

According to the National Wetlands Inventory (USFWS 2004), the growth areas contain wetlands at varying proportions. Table 3.3-3 summarizes the proportion of wetlands within each growth area to illustrate how wetland extent varies across the county's anticipated growth areas.

Without the CAPO, increased growth would likely increase wetland impacts, with magnitude scaling to development. Some wetlands (e.g., those associated with the Chehalis, Elk, or Johns Rivers) would still receive some protection within FEMA-regulated floodplains. Pursuant to GHCC 18.06, buffers and setbacks reduce but may not fully prevent water quality degradation where increased impervious surfaces lead to water runoff and pollution. If wetland fill is permitted with mitigation, compensation may occur outside the local growth area, maintaining county-wide wetland acreage/functions but reducing localized wetland functions in the affected growth area.

Table 3.3-3. Percent Wetland Coverage within Areas of Potential Growth

Potential Growth Area	Coverage Description	Percent Wetland ^[a]
A	Limited percent cover	4%
B	Significant presence of freshwater emergent, freshwater forested/shrub, and estuarine/marine wetlands	14%
C	Limited percent cover	5%
D	Significant presence of freshwater emergent, freshwater forested/shrub, and estuarine/marine wetlands	23%
E	Substantial freshwater forested/shrub and freshwater emergent wetlands, largely associated with the Chehalis River floodplain	32%
F	Limited percent cover	7%
G	Limited percent cover	7%
H	Limited percent cover	5%
I	Mix of freshwater and estuarine/marine wetlands associated with the Elk and Johns River systems	10%
J	Limited percent cover	3%

Source: USGS 2024.

^[a] Wetlands include riverine settings.

Water Quality

Overall, potential for adverse water quality impacts increase with development intensity and is influenced by existing impairments, stormwater controls, and proximity to sensitive waters.

- Area A: three impaired streams (unnamed) and one impaired Pacific Ocean segment—moderate to high potential for adverse effects under all alternatives.
- Area B: one impaired (unnamed) small stream segment—low potential for adverse effects.

- Areas C, E, F, and J: no impaired waterbodies—low potential for adverse effects.
- Area D: Grays Harbor Ditch is listed for several parameters—moderate potential for adverse effects.
- Area G: Cloquallum Creek impaired—moderate potential.
- Area H: Humptulips River and Deep Creek impaired—moderate potential.
- Area I: Grays Harbor Inner impaired—moderate potential.

Stormwater

Increased development may increase peak flows and volumes to existing systems, potentially requiring retrofits or added infrastructure. Expanded development may also require additional treatment to reduce pollutant loading risks to water quality and drinking water supply.

Most developed stormwater systems in the county are concentrated near Aberdeen; only Area E overlaps a municipal stormwater permit area. Because Lake Aberdeen is a drinking water reservoir, increased development in Area E that drains to the lake may pose heightened water quality risk. Consequently, Area E has a moderate potential for adverse stormwater impacts, while other growth areas have low potential.

Impacts by Alternative

Alternative 1: No Action

Under Alternative 1, water resource effects would generally reflect existing conditions and current regulatory protections, with limited changes expected across most resource categories and no significant impacts. A summary of these effects is provided as follows. Table 3.3-4 summarizes No Action water resource effects by category under existing conditions and regulations.

Table 3.3-4. Potential Impacts of Alternative 1 on Water Resources

Impact	Description
Groundwater/ Drinking Water Supply	Adequate supply is assumed; low potential for adverse effects, with localized risks where impervious surfaces increase without added controls.
Rivers/Streams/ Waterbodies	Moderate potential for adverse effects where development proceeds under existing conditions (e.g., localized buffer encroachments or unmanaged runoff).
Floodplains	Risks remain where development interfaces with mapped or unmapped flood hazards; site-specific considerations apply.
Wetlands	Pursuant to GHCC 18.06, impacts are reduced but not eliminated; localized functions can still be affected by runoff and potential offsite mitigation.
Water Quality	Potential impacts track existing impairments; areas with listed waters have greater sensitivity.
Stormwater	Generally lower system demand than Alternatives 2 and 3; retrofit needs are limited to existing constraints.

Alternative 2: Moderate Growth

Under Alternative 2, higher levels of development relative to the No Action Alternative would increase demand on groundwater supplies, surface water systems, and stormwater infrastructure. These impacts would generally scale with added impervious surface, greater land disturbance, and expanded development in areas with existing water resource constraints. Elevated growth levels would also increase the likelihood of localized effects on wetlands, floodplains, and water quality, particularly in areas with known impairments or limited stormwater controls, but no significant impacts are expected. Table 3.3-5 summarizes the potential water resource effects of the Moderate Growth Alternative by resource category.

Table 3.3-5. Potential Impacts of Alternative 2 on Water Resources

Impact	Description
Groundwater/ Drinking Water Supply	Moderate potential for adverse effects from increased demand, reduced recharge, and greater contamination potential without effective stormwater controls.
Rivers/Streams/ Waterbodies	Moderate to high potential for adverse effects from hydrologic alteration and pollutant loading, scaling with added impervious surface.
Floodplains	Increased exposure of new infrastructure to flood and channel-migration risk unless avoided; potential encroachment on flood storage/adjustment areas.
Wetlands	Increased risk of direct/indirect impacts; CAPO reduces but does not eliminate effects; potential local loss of function where mitigation is offsite.
Water Quality	Moderate potential basin-wide; higher in growth areas with impaired waters.
Stormwater	Increased flows and treatment needs; targeted retrofits/new facilities likely where systems are limited (notably in/near Area E).

Alternative 3: High Growth

Under Alternative 3, the highest level of development would place the greatest demand on groundwater supplies, surface waters, wetlands, floodplains, and stormwater systems. Increased impervious surface, greater land disturbance, and expanded infrastructure needs would heighten the potential for adverse effects across all water resource categories, particularly in areas already constrained by water quality impairments, limited recharge, or sensitive hydrologic features. Table 3.3-6 summarizes the potential water resource effects of the High Growth Alternative by resource category.

Table 3.3-6. Potential Impacts of Alternative 3 on Water Resources

Impact	Description
Groundwater/ Drinking Water Supply	Moderate to severe potential for adverse effects due to highest demand, recharge reduction, and contaminant loading risk if stormwater is not effectively managed.
Rivers/Streams/Waterbodies	High potential for impacts; greatest hydrologic change and pollutant load increases without robust controls.
Floodplains	Highest likelihood of infrastructure exposure and functional encroachment unless avoided; increased potential for long-term habitat/function degradation.
Wetlands	Highest likelihood of direct/indirect impacts; CAPO and mitigation reduce but do not eliminate localized function losses.
Water Quality	Moderate to high potential for adverse effects, especially in areas with existing impairments.
Stormwater	Greatest increases in peak flows/volumes and treatment needs; Area E remains the most sensitive due to Lake Aberdeen drainage.

3.3.3 Avoidance, Minimization and Mitigation

Incorporated Plan Features

Alternatives 1, 2, and 3 are focused on increasing density in already developed areas rather than new greenfield developments. This pattern of development will avoid impacts on water resources over most of the county. Potential impacts will be in areas that have already been impacted, with opportunities to minimize impacts by bringing many of these areas up to more modern regulatory standards as they are redeveloped.

Applicable Regulations and Commitments

Existing local, state, and federal regulations, discussed in Section 3.3.1, are aimed at protecting water resources from development and other impacts. These regulations will help to avoid and minimize potential impacts to water resources, and some provide for mitigation of impacts that cannot be avoided.

The County is required to review and potentially update its CAPO in 2027 as part of the required GMA periodic review. This update may incorporate current best available science and evolving state requirements related to habitat protection, water quality, and critical areas management.

Other Potential Mitigation Measures

The County CAPO provides exemptions from wetland buffers where wetlands meet certain criteria associated with wetland type, size, habit function, association with shorelines, and more. Where these criteria are met, wetlands may be filled if the impacts are fully mitigated through a

mitigation banking system. The County could establish additional wetland mitigation banks for currently unserved county areas.

The County may amend regulations to require use of Ecology's SWMMWW for commercial and industrial developments and grading activities.

3.3.4 Significant Unavoidable Adverse Impacts

The most significant unavoidable impact is the increased potential to affect drinking water supplies with increased growth and demand. While the effects to other water resources can be minimized by growth focused on increasing density in already developed areas, the demand for drinking water will generally increase in direct proportion to the population. There can be some level of minimization by encouraging efficiency in water usage, but increased demand will unavoidably impact water supply availability because population growth increases overall demand for potable water, regardless of where growth is focused.

3.4 Plants and Animals

This section reviews protected fish, wildlife, and vegetation species and habitats within the county and reasonably foreseeable effects associated with the proposed alternatives. Mitigation measures that may be used to avoid or minimize these impacts are also discussed. Wetlands, streams, floodplains, and other waterbodies that provide habitat for fish and wildlife are detailed in Chapter 3.3, Water Resources.

The study area is defined by the county's jurisdictional boundaries, with more intensive review focused on the potential growth areas.

3.4.1 Affected Environment

The following sections address the regulatory setting and existing conditions of protected fish, wildlife, and vegetation species and associated habitats within the county.

Regulatory Setting

Grays Harbor County applies to a suite of local regulations to protect critical areas, natural resources, and ecological functions while guiding land use and development (Appendix B-1). The CAPO (GHCC 18.06) identifies and safeguards wetlands, aquifer recharge areas, frequently flooded areas, geologically hazardous areas, fish and wildlife habitat conservation areas, and associated vegetation, ensuring these resources are preserved while allowing reasonable use of property consistent with the GMA.

The County also designates and manages natural resource lands through GHCC 18.10, which classifies lands of long-term commercial significance in accordance with state requirements (Appendix A-1). Forestland conversion and related activities are regulated under GHCC Title 14 (Forest Practices) to align local development with the Washington State Forest Practices Act and to protect public resources during land conversion activities.

Water quality and habitat protection along the Pacific Coast Growing Area are supported by the North Beach Shellfish Protection District (GHCC 18.20), which develops strategies to address and prevent shellfish bed downgrades (County n.d.). The Grays Harbor County SMP (2023) implements the Shoreline Management Act to guide shoreline use and protect shoreline ecological functions county-wide.

Grays Harbor County Code Title 16 (Subdivisions) requires that new development comply with applicable drainage and stormwater standards, Ecology's SWMMWW, and establishes landscaping requirements to guide site design, manage stormwater, and reduce impacts on receiving waters and associated habitats.

State Framework

Washington State regulations provide additional protections for fish, wildlife, and aquatic ecosystems relevant to the county. Project-level SEPA review (RCW 43.21C) is applied at the local level, with the County serving as lead agency to identify and evaluate potential significant environmental impacts before project approval.

The Hydraulic Code (RCW 77.55) requires a Hydraulic Project Approval (HPA) from the Washington Department of Fish and Wildlife (WDFW) for any construction that may affect state waters, ensuring that in-water or over-water activities are conducted in a manner that protects fish life and aquatic habitats.

WDFW also implements the federally approved Coastal Zone Management Program, administered by Ecology, which ensures that federal actions affecting the state's 15 coastal counties—including the county—are consistent with enforceable state coastal policies. This program strengthens state–federal coordination and helps safeguard coastal resources from avoidable impacts.

Federal Framework

A comprehensive federal regulatory framework governs the protection of plant and animal species in the county. Key statutes include the Endangered Species Act (ESA), Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Marine Mammal Protection Act provide protections for listed, migratory, and sensitive wildlife species and their habitats. Additional laws such as the Fish and Wildlife Coordination Act and the Marine Protection, Research, and Sanctuaries Act ensure that federal actions involving water resources and marine environments incorporate wildlife conservation considerations.

Federal oversight also extends to aquatic resources through Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, which regulate in-water construction and the discharge of dredged or fill material. Marine fishery resources and essential fish habitats (EFHs) are managed under the Magnuson–Stevens Fishery Conservation and Management Act. Federal policy on invasive species is coordinated through the National Invasive Species Council under Executive Orders 13112 and 13751. Finally, major federal actions affecting biological resources must comply with the National Environmental Policy Act, which requires evaluation and disclosure of environmental impacts prior to decision-making.

Existing Conditions

Protected Fish and Aquatic Species

Protected fish and aquatic species identified as priority species by WDFW and federal agencies are summarized in the table in Appendix B-2, including their ESA status and the presence of designated critical habitat or National Oceanic and Atmospheric Administration National Marine Fisheries Service EFH within the county.

Protected Wildlife Species

Wildlife species identified as priorities for conservation and management by WDFW, including federal- and state-listed species, species vulnerable due to low populations or specialized habitat needs, and species of commercial, recreational, or tribal importance, are summarized in Table 3.4-1. Within the county, priority wildlife includes several federally listed birds and mammals, as well as sensitive amphibians, reptiles, and invertebrates.

Consistent with GHCC 18.02, “species of local importance” are those designated by WDFW due to their vulnerability to habitat loss or degradation. These species are included in Table 3.4-1 with their federal and state ESA status and whether designated critical habitat occurs within the county.

Table 3.4-1. Protected Wildlife Species Documented in Grays Harbor County

Common Name	Scientific Name	Federal ESA Status	State ESA Status	Designated CH within the County
Birds				
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	T	E	Y
Northern Spotted Owl	<i>Strix occidentalis caurina</i>	T	E	Y
Western Snowy Plover	<i>Strix occidentalis caurina</i>	T	E	Y
Streaked Horned Lark	<i>Eremophila alpestris strigata</i>	T	E	Y
Tufted Puffin	<i>Fratercula cirrhata</i>	N	E	N
Hawaiian Petrel	<i>Pterodroma sandwichensis</i>	E	N	N
Short-tailed Albatross	<i>Phoebastria (=Diomedea) albatrus</i>	E	C	N
Bald Eagle	<i>Haliaeetus leucocephalus</i>	N ^[a]	Protected - Other	N
Golden Eagle	<i>Aquila chrysaetos</i>	N ^[a]	C	N
Mammals				
Orca (Southern Resident)	<i>Orcinus orca</i>	E	E	Y
Fisher	<i>Pekania pennanti</i>	C	E	N
Northern Sea Otter	<i>Enhydra lutris kenyon</i>	T	S	N
Harbor Seal	<i>Phoca vitulina</i>	N	N	N
Steller Sea Lion	<i>Eumetopias jubatus</i>	N	N	N
California Sea Lion	<i>Zalophus californianus</i>	N	N	N
Reptiles and Amphibians				
Western Toad	<i>Anaxyrus boreas</i>	None	C	N
Van Dyke's Salamander	<i>Plethodon vandykei</i>	None	C	N
Northwestern Pond Turtle	<i>Actinemys marmorata</i>	C	E	N
Invertebrates				
Mardon Skipper	<i>Polites mardon</i>	E	E	N
Western Bumble Bee	<i>Bombus occidentalis</i>	C	C	N
Taylor's Checkerspot	<i>Euphydryas editha taylori</i>	E	E	N

Source: WDFW 2023

^[a] Federally protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

C = candidate

S = sensitive

CH = critical habitat

T = threatened

E = endangered

Y = yes

N = none

Priority wildlife documented in the county include multiple ESA-listed bird species such as marbled murrelet and northern spotted owl; marine mammals including the Southern Resident orca, harbor seal, and sea lions; at-risk amphibians and reptiles such as western toad and northwestern pond turtle; and several imperiled invertebrates including the Mardon skipper, Taylor's checkerspot, and western bumble bee.

Protected Vegetation Species

Endangered or threatened plant species are protected under the federal ESA and state law. In the State of Washington, the Natural Area Preserves Act directs DNR to "maintain a natural heritage program" and a statewide rare plant database (RCW 79.70.030(6)); State Parks policy also calls for preserving habitat for endangered, threatened, and sensitive plants on parks lands (RCW 79A.05.305(5)). The DNR Washington Natural Heritage Program (WNHP) maintains the official lists and spatial database of vascular and non-vascular plant species of conservation concern (with state statuses endangered, threatened, sensitive, plus extirpated/historic categories) and curates public element-occurrence records. Table 3.4-2 summarizes vascular plant species of conservation concern known to occur within the county based on the WNHP (Miller et al. 2024).

Table 3.4-2. Rare Vascular Plants of Concern Known to Occur within Grays Harbor County

Common Name	Scientific Name	Federal Status	State Status
Tall bugbane	<i>Actaea elata</i> var. <i>elata</i> (<i>Cimicifuga elata</i>)	None	S
Cooley's buttercup	<i>Arcteranthis cooleyae</i> (<i>Kumlienian cooleyae</i> , <i>Ranunculus cooleyae</i>)	B-Sens, F-Sens	S
Yellow-flowered sedge	<i>Carex anthoxanthea</i>	B-Sens, F-Sens	S
Coiled sedge	<i>Carex circinata</i>	B-Sens, F-Sens	S
Weak thistle	<i>Cirsium remotifolium</i> var. <i>remotifolium</i>	F-Sens	E
Pacific lanceleaved springbeauty	<i>Claytonia multiscapa</i> ssp. <i>pacifica</i>	F-Sens	S
Scurvygrass	<i>Cochlearia groenlandica</i>	None	S
Spleenwort-leaved goldthread	<i>Coptis asplenifolia</i>	B-Sens, F-Sens	S
Eastwood's daisy	<i>Erigeron aliceae</i>	F-Sens	S
Thompson's fleabane	<i>Erigeron peregrinus</i> var. <i>thompsonii</i>	None	E
Olympic fawn-lily	<i>Erythronium quinaultense</i>	F-Sens	T
Coast fawn-lily	<i>Erythronium revolutum</i>	None	S
Branched montia	<i>Montia diffusa</i>	B-Sens, F-Sens	S
Marsh grass-of-Parnassus	<i>Parnassia palustris</i> (includes var. <i>neogaea</i> & <i>tenuis</i>)	B-Sens, F-Sens	S
Henderson's rockmat	<i>Petrophytum hendersonii</i>	None	S
Alaska plantain	<i>Plantago macrocarpa</i>	None	S

Common Name	Scientific Name	Federal Status	State Status
Short-spurred plectritis	<i>Plectritis brachystemon</i> (<i>P. congesta</i> ssp. <i>brachystemon</i>)	F-Sens	S
Lax-flower bluegrass	<i>Poa laxiflora</i>	F-Sens	S
Salmon Jacob's-ladder	<i>Polemonium carneum</i>	B-Sens, F-Sens	T
Frigid shootingstar	<i>Primula austrofrigidum</i>	B-Sens, F-Sens	E
Menzies' burnet	<i>Sanguisorba menziesii</i>	None	T
Bear's-foot sanicle	<i>Sanicula arctopoides</i>	B-Sens, F-Sens	S
Columbia white-topped aster	<i>Sericocarpus rigidus</i> (<i>Aster curtus</i>)	B-Sens, F-Sens	S
Fringed kittentails	<i>Veronica schizantha</i> (<i>Synthyris schizantha</i>)	F-Sens	E

Source: Miller et al. 2024.

B-Sens = Bureau of Land Management Sensitive

C = candidate

E = endangered

F-Sens = U.S. Forest Service Sensitive

N = none

S = sensitive

T = threatened

Within the county, no vascular plants are federally listed as endangered or threatened under ESA, but numerous species are recognized as federal Species of Concern or are designated as sensitive by federal land management agencies (for example, U.S. Forest Service and Bureau of Land Management). Three species (Olympic fawn-lily, salmon Jacob's-ladder, and frigid shootingstar) hold state ESA-equivalent designations but are not federally listed. Most remaining species in Table 3.4-2 carry state sensitive or endangered statuses but lack any federal listing or federal agency sensitivity designation.

Along the northeastern boundary of the county, where the county transitions into the Olympic foothills and the Quinault River drainage, WNHP data show clusters of rare plant occurrences in montane-influenced forests and riparian benches, including Olympic fawn-lily, frigid shootingstar, and salmon Jacob's-ladder. These distributions reflect the ecological connection between this corner of the county and the lower elevations of the Olympic National Forest.

Along the western and northwestern county boundary bordering the Pacific Ocean, rare plant occurrences are concentrated in coastal prairies, bluff systems, and marine terraces. Species recorded in this coastal zone include bear's-foot sanicle, Columbia white-topped aster, and weak thistle, which are characteristic of the open, wind-exposed habitats along the county's outer-coast margin.

Across the central and southern lowlands of the county, WNHP data indicate rare plant occurrences (including scurvygrass, marsh grass-of-Parnassus, and branched montia) within river floodplains, wetland mosaics, and tidally influenced areas draining toward the Grays Harbor estuary. These species generally follow the county's primary river corridors and associated wetlands.

Within the east-central interior of the county, between the lowland valleys and the rising foothills, rare plant species (including spleenwort-leaved goldthread, Cooley's buttercup, and

lax-flower bluegrass) occur in moist conifer forests, upland benches, and forested wetlands. These species occupy the transitional forested landscape that lies between the county's central lowlands and its eastern uplands.

Noxious Weeds

The Washington State Noxious Weed Control Board defines noxious weeds as non-native plants that have been introduced to Washington from other parts of the world. Because of their aggressive growth and lack of natural enemies, these species can be highly destructive, competitive, or difficult to control (WSNWCB n.d.). Appendix B-3 summarizes the County's Noxious Weed Control Board's defined Class A Weeds, for which eradication is required (GHCNWCB 2025).

Protected Habitats

The county spans the Western Hemlock Zone (dominated by conifers including Douglas-fir, western hemlock, western redcedar) and Sitka Spruce Zone along the coast and estuary margins. Historic late-successional forests have largely transitioned to second- and third-growth stands; coastal prairies, marshes, and dune systems persist along the outer coast and estuary margins. Rare plant occurrences align with montane-influenced forests, coastal terraces, and tidally influenced lowland areas.

The county encompasses estuarine, riverine, nearshore marine, coastal dune and beach systems, riparian corridors, upland coniferous forests, and agricultural lands that support numerous fish and wildlife species. Estuarine and nearshore habitats in Grays Harbor provide salinity transition and rearing functions for anadromous salmonids and support extensive intertidal flats and channels used by forage fish and shellfish. River corridors (including the Chehalis, Humptulips, Hoquiam, Wishkah, and Wynoochee Rivers) and their tributaries provide migration, spawning, and rearing habitats and link inland habitats to the estuary and Pacific coast. Upland forests in the Willapa Hills and foothills provide nesting, roosting, and foraging habitats for forest-dependent wildlife.

Together, these broad habitat types shape the distribution of fish, wildlife, and vegetation, and support ecological functions across the county. The subsections that follow outline the primary regulatory and conservation designations that relate to these habitats.

Fish and Wildlife Habitat Conservation Areas

Fish and Wildlife Habitat Conservation Areas (FWHCAs) include habitats associated with state or federally listed species, candidate/species of concern, and WDFW Priority Habitats/Species, along with rivers, streams, marine shorelines, lakes, and riparian environments. Because these habitats provide migration, spawning, rearing, foraging, and shelter functions, development is conditioned to avoid degradation. Under GHCC 18.06.650, Lake Quinault is designated as its own FWHCA due to its regional ecological importance; development near the lake is subject to stricter review and buffers

Essential Fish Habitat

EFH for federally managed species occurs in the estuary, river mouths, nearshore coastal waters, and offshore areas. EFH supports salmonids, forage fish, groundfish, and other marine species, and emphasizes the conservation of habitats necessary for spawning, breeding, feeding, and growth to maturity for federally managed fish.

Critical Habitat

Designated ESA critical habitat occurs in the county for several listed species. Examples include marbled murrelet and northern spotted owl within mature or old-growth forests, western snowy plover and streaked horned lark within coastal beaches and dunes, bull trout within cold water riverine systems (e.g., the Humptulips, Wynoochee, and Chehalis Rivers), and Southern Resident killer whale within offshore coastal waters adjacent to Grays Harbor.

Priority Habitats and Features

WDFW priority habitats and features within the county are summarized in Table 3.4-3 (WDFW 2023). This is the statewide catalog of priority habitats, priority species, and associated management information.

Table 4.4-3. WDFW Priority Habitats within Grays Harbor County

Habitat Category	WDFW Priority Habitat Types
Terrestrial	Biodiversity areas and corridors Herbaceous balds Old-growth/mature forest Oregon white oak woodlands West side prairie Riparian
Aquatic	Freshwater wetlands and fresh deepwater Instream Open coast nearshore Coastal nearshore
Habitat Features	Caves Cliffs Snags and logs Talus

Source: WDFW 2023.

Natural/Conservation Areas

Unincorporated Grays Harbor County contains several state-managed protected areas that preserve high-value estuarine, wetland, and freshwater habitats essential for fish, wildlife, and native vegetation, including the following:

- The Chehalis River Surge Plain Natural Area Preserve is a 4,494-acre tidal surge-plain wetland complex at the Lower Chehalis River that includes sloughs supporting juvenile salmon, extensive Sitka spruce and western redcedar wetlands, and habitat used by osprey, bald eagles, and Olympic mudminnow (DNR n.d.-b).
- The Elk River Natural Resources Conservation Area is an approximately 5,560-acre area protecting one of the largest and highest-quality estuarine systems in Washington and Oregon, composed of tide flats, salt marsh, freshwater wetlands, and forested uplands habitats that support migratory shorebirds, waterfowl, bald eagle nesting areas, and habitat for elk, beaver, and river otter (DNR n.d.-c).
- The North Bay Natural Area Preserve is a 1,215-acre preserve containing high-quality coastal freshwater wetland and sphagnum bog communities, supporting multiple wetland plant assemblages, shorebird and waterfowl concentration areas, harbor seal haul outs, and sensitive species such as the Makah copper butterfly and Olympic mudminnow (DNR n.d.-d).
- The Johns River Wildlife Area is part of an approximately 11,200-acre complex focused on estuary and wetland habitats along Grays Harbor and Willapa Bay, managed by WDFW to support big and small game species, migratory birds, and native fish populations. Within the county, the Johns River Unit includes diked estuary restoration areas, waterfowl habitat, and accessible recreation corridors (WDFW 2026a).

3.4.2 Potentially Significant Impacts

The following subsections describe the method of analysis for determining potential impacts and evaluate the potential impacts of the three alternatives on fish, wildlife, plants, and habitats of importance in the county. A key consideration across the alternatives is how and where future population growth would be distributed throughout the county.

Methods of Analysis

This analysis evaluates how the spatial distribution of projected growth may affect fish, wildlife, and vegetation resources. When land is converted for urban or higher intensity uses, habitat fragmentation, loss, and degradation can occur. In contrast, growth strategies that emphasize higher density development within existing developed areas are generally more protective of habitat outside those areas, though intensifying development within these areas can still introduce stressors to remaining or isolated habitat patches.

This analysis relies on a combination of desktop review and geographic information system-based spatial analysis to understand how the alternatives intersect with fish and wildlife habitat. Site-specific surveys were not conducted. Existing federal and state datasets were reviewed to identify existing habitat, key habitat features, species-use areas, vegetation communities, and other ecological resources within each growth area. Potential effects were then qualitatively assessed based on the location, sensitivity, and ecological function of fish, wildlife, and vegetation resources relative to the extent and pattern of anticipated development.

Impacts Common to All Alternatives

All three alternatives would have the potential to affect fish, wildlife, and vegetation resources due to continued population growth and related land use changes, consistent with the county-wide growth patterns and land use changes described in Chapter 2. While the severity, extent, and geographic distribution of impacts would vary depending on how each alternative directs future development, the general types of ecological effects would be similar across alternatives.

Regardless of growth patterns, new or intensified development would introduce common stressors, including vegetation clearing, soil compaction, greater human disturbance, noise and lighting, and the introduction of impervious surfaces. As a result, all of the alternatives would contribute to similar ecological outcomes, including the following (WDFW 2009):

- Convert intact habitat into built environments
- Fragment remaining natural areas and create more “edge” habitat
- Disrupt wildlife movement corridors and reduce connectivity
- Alter hydrologic processes and increase pollutant transport
- Degrade riparian, wetland, and upland habitats through changes in runoff, microclimate, and invasive species pressure

Under all alternatives, development would continue to be subject to existing County policies and regulations, including the CAPO (GHCC 18.06) and regulations governing land-disturbing activities such as clearing, grading, filling, and excavation (GHCC Title 15). These measures are intended to protect sensitive fish and wildlife species, vegetation communities, wetlands, and other critical areas, consistent with the County’s partially planning status under the GMA. Site-specific environmental review would remain applicable for individual development proposals, ensuring that avoidable impacts are reduced and that required mitigation is applied where impacts cannot be avoided.

Under all alternatives, development would result in alterations to aquatic systems, including increased impervious surfaces, modified runoff patterns, and potential pollutant loading. Riparian areas, inland watersheds, and hydrologically sensitive areas would be most susceptible to disturbance. While the degree of impact would vary by alternative, some level of aquatic habitat disturbance would occur in all cases.

Wildlife and Associated Habitat

Each alternative would result in some level of wildlife habitat loss, modification, or fragmentation in areas where development occurs. Common effects would include habitat conversion, increased edge habitat, and disruption of wildlife movement patterns. The extent to which impacts extend into undeveloped or semi-intact habitats would depend on how growth is distributed across the county.

Vegetation

Vegetation removal and fragmentation would occur under all alternatives to accommodate development and support infrastructure. Native forests, shrublands, grasslands, and other

vegetative communities would be affected to varying degrees. While some impacts would occur within previously disturbed areas, expansion into undeveloped lands would increase vegetation loss and fragmentation as growth intensity and spatial dispersion increase.

Impacts by Alternative

Alternative 1: No Action

Under Alternative 1, growth would continue largely under existing land use patterns, resulting in modest population increases and incremental development dispersed across rural and semi-rural areas. Because this alternative reflects continuation of current trends, only limited changes to county-wide development patterns would occur. However, gradual encroachment into vegetated and partially developed areas would continue over time.

Impacts to fish, wildlife, and vegetation under Alternative 1 would generally be the lowest in magnitude of the three alternatives, due to the relatively low level of overall growth (Table 4.4-4). While impacts would occur in multiple locations across the county, they would be incremental, localized, and predictable, with limited cumulative effects when compared to alternatives that accommodate higher growth levels. Habitat disturbance and fragmentation would continue at a slow pace, resulting in a smaller overall footprint of disturbance relative to Alternatives 2 and 3.

Table 4.4-4. Potential Impacts of the No Action Alternative

Impact	Description
Fish and Aquatic Habitat	▪ Less new disturbance would occur in rural or intact aquatic habitats. ▪ Impacts would remain localized within development centers. ▪ Concentrated growth would limit the overall geographic spread of aquatic habitat degradation.
Wildlife and Associated Habitat	▪ Concentrating growth within already disturbed areas would reduce fragmentation of intact wildlife habitats elsewhere in the county. ▪ Habitat within development centers would still be affected, but impacts would be localized and more predictable. ▪ County-wide habitat loss and new movement barriers would be reduced due to limited outward expansion.
Vegetation	▪ Concentrating new development in Mixed-Use and Urban Services areas would reduce clearing of intact vegetation elsewhere in the county. ▪ Vegetation impacts would remain localized within existing developed or previously disturbed areas. ▪ County-wide vegetation disturbance would decrease as outward expansion is limited.

Alternative 2: Moderate Growth

Alternative 2 would accommodate a moderate level of population and development growth while adjusting development patterns to reduce exposure to flood- and sea level rise-prone areas. This alternative would shift some growth away from vulnerable coastal and floodplain locations and redirect development toward inland areas already served by infrastructure.

By reducing allowable densities in locations subject to flooding or sea level rise and guiding growth toward less sensitive inland areas, Alternative 2 would lower the likelihood of new development occurring in undisturbed habitat. Although impacts to fish, wildlife, associated habitat, and vegetation would still occur, targeted avoidance of particularly vulnerable areas would help moderate both the intensity and extent of new disturbance.

Overall, Alternative 2 would result in moderate impacts, falling between Alternatives 1 and 3 (Table 4.4-5). Development would expand into inland and upland areas, resulting in greater overall disturbance than Alternative 1, but impacts would be more spatially focused and less widespread than under a more dispersed, high-growth pattern. As a result, impacts under Alternative 2 would be more extensive than Alternative 1, but less severe and less geographically widespread than Alternative 3, due to partial growth concentration and strategic avoidance measures.

Table 4.4-5. Potential Impacts of the Moderate Growth Alternative

Impact	Description
Fish and Aquatic Habitat	▪ Avoiding vulnerable hydrologic areas would lessen impacts in certain riparian and coastal habitats. Inland watersheds would still face increased runoff and pollutant loading.
Wildlife and Associated Habitat	▪ Avoiding vulnerable coastal and riparian areas would lessen habitat loss in particularly sensitive wildlife zones. ▪ Inland and upland wildlife habitats would still experience fragmentation where development occurs. ▪ Wildlife impacts would be more spatially focused and less widespread than under a dispersed growth pattern.
Vegetation	▪ Vegetation removal would still occur where new development is allowed. ▪ Redirecting growth away from sensitive vegetated areas would reduce clearing pressure in coastal or flood-prone vegetative communities. ▪ Fragmentation and loss would persist in other buildable portions of the county, but with reduced severity compared to a dispersed pattern (i.e., Alternative 1).

Alternative 3: High Growth

Alternative 3 would accommodate the greatest increase in population and overall development within the county. Unlike Alternatives 1 and 2, growth under this alternative would be less constrained spatially, resulting in a more dispersed development pattern that extends beyond existing urbanized or service-ready areas.

As a result, Alternative 3 would produce the highest magnitude and broadest distribution of impacts to fish, wildlife, vegetation, and associated habitats (Table 4.4-6). Development would incrementally affect aquatic systems, upland and riparian wildlife habitats, and vegetated communities across a wide geographic area, including intact or semi-undisturbed lands. Habitat loss, fragmentation, and cumulative effects would occur at a larger spatial scale, increasing disruption to wildlife movement corridors, ecosystem connectivity, and overall habitat integrity.

Compared to Alternatives 1 and 2, Alternative 3 would result in the greatest spatial extent of disturbance, affecting a wider range of species, habitats, and ecosystem functions due to the dispersed nature of growth and reduced concentration within established development centers.

Table 4.4-6. Potential Impacts of the High Growth Alternative

Impact	Description
Fish and Aquatic Habitat	▪ Dispersed development would produce widespread, low to moderate intensity aquatic impacts across a broad geographic area. ▪ Hydrologically sensitive areas would be more frequently affected. ▪ Cross-watershed cumulative degradation would be higher due to lack of development concentration.
Wildlife and Associated Habitat	▪ Dispersed development would incrementally fragment upland forests, riparian corridors, and rural open spaces. ▪ A broader range of wildlife species would be affected as intact or semi-undisturbed habitats would be more frequently subject to encroachment. ▪ Wildlife movement corridors would experience greater interruption due to spread-out habitat conversion.
Vegetation	▪ Widespread, incremental clearing would remove native forest, shrub, and grassland communities across a broad geographic area. ▪ Fragmentation of vegetation communities would increase, affecting a wider variety of habitat types. ▪ Vegetation diversity and structural complexity would diminish as intact or semi-undisturbed areas would be more frequently disturbed.

3.4.3 Avoidance, Minimization, and Mitigation

- Alternative 1 would provide the greatest avoidance and minimization relative to Alternatives 2 and 3 because concentrating development within already urbanized or service-ready areas would limit outward expansion into intact fish and wildlife habitat and undisturbed vegetation, confining impacts primarily to areas where habitat functions are already reduced.
- Alternative 2 would provide a moderate level of avoidance and minimization relative to Alternatives 1 and 3 because some development would shift away from flood- and sea-level-rise-prone areas that provide valuable habitat for many species (including salmonids, shorebirds, waterfowl, amphibians, and terrestrial wildlife). However, inland and upland areas would still experience fragmentation where development continues.

- Alternative 3 would provide the least avoidance or minimization of impacts on fish, wildlife, associated habitat, and vegetation relative to the other alternatives, because development would remain dispersed across rural and semi-natural areas, increasing the likelihood that intact fish and wildlife habitat and native vegetation communities would be newly disturbed.

Incorporated Plan Features

Land use policies and critical area regulations encourage new growth and development to locate outside of critical areas.

Applicable Regulations and Commitments

The following subsections describe the regulatory requirements and additional mitigation measures that guide how unavoidable impacts on fish, wildlife, associated habitat, and vegetation are addressed, and conclude with a summary of the significant adverse impacts that may remain under each of the proposed alternatives.

Existing federal, state, and County regulations summarized in Section 3.4.1 will continue to regulate development activities, ensuring that impacts on fish, wildlife, vegetation, and associated habitats are avoided, minimized, or, where unavoidable, offset through compensatory mitigation.

Other Potential Mitigation Measures

In addition to the existing federal, state, and County regulations that provide a framework for avoiding, minimizing, and mitigating impacts on fish, wildlife, vegetation, and associated habitats (as outlined in Section 3.4.1), there are several optional measures that the County may consider to further support these resources. The following potential mitigation measures are not regulatory requirements but represent additional strategies that could enhance resource stewardship, improve environmental outcomes, and complement existing protections during future development and redevelopment activities within the county:

- Update GHCC and associated technical guidance to incorporate current best available science and evolving state requirements related to habitat protection, water quality, and critical areas management.
- Increase community education and outreach on the ecological value of native plants and their role in supporting fish, wildlife, and habitat function.
- Retain and enhance native vegetation, with emphasis on preserving mature trees and structurally diverse plant communities during development and redevelopment.
- Protect native soils and hydrologic processes by maintaining native vegetative buffers and corridors within Residential and Commercial areas to support stormwater management, microclimate stability, ecological function, and visual quality.
- Limit expansion of impervious surfaces by applying applicable low-impact development practices consistent with Ecology's SWMMWW (Ecology 2019, as amended).
- Improve habitat connectivity by prioritizing mitigation and restoration projects in fragmented wildlife movement corridors outside of agricultural resource lands.

- Incorporate watershed-scale ecological processes when evaluating restoration, open-space acquisition, habitat enhancement, or conservation easement opportunities to strengthen habitat connectivity and watershed function.
- Develop a coordinated landowner stewardship program modeled on regional regulatory and restoration frameworks, offering restoration guidance, native planting recommendations, long-term maintenance strategies, optional protective tools (for example, easements, notices on title), and educational opportunities such as workshops, demonstration projects, and site-specific consultations.
- Support long-term stewardship of high-value habitats by placing such areas into public ownership when feasible outside of agricultural resource lands.
- Implement programmatic, non-project-level mitigation approaches where planning areawide impacts are anticipated, such as county-wide or watershed-scale restoration initiatives.

3.4.4 Significant Unavoidable Adverse Impacts

Across all three alternatives, unavoidable impact on fish, wildlife, vegetation, and associated habitats would occur as the county continues to grow. How each alternative would distribute new growth and, in turn, influence the degree of unavoidable impacts to these resources. These impacts would primarily result from additional human presence, increased noise and activity, and the gradual conversion of vegetated areas to developed uses.

Locations not directly associated with critical areas and associated protections would be the most vulnerable under all alternatives, with the greatest potential for fish, wildlife, and vegetation/habitat impacts occurring under Alternative 1, and to a lesser extent, Alternative 2, that would introduce new growth into currently undeveloped or partially developed areas. Such patterns of development can contribute to long-term disturbance of fish and wildlife species and further fragmentation of existing habitat networks. Although regulatory updates, mitigation requirements, and site-specific BMPs would reduce the extent of these impacts, they cannot be eliminated entirely under any of the alternatives.

3.5 Land and Shoreline Use

This section generally describes the existing and proposed land use conditions and policy framework in the county. The anticipated changes in patterns of land use and shoreline use are compared for the implementation of the three proposed alternatives. The study area is defined by county boundaries, and consists of only unincorporated areas within the county.

3.5.1 Affected Environment

This section outlines the regulatory, jurisdictional, and existing land use conditions that provide the context for evaluating land use impacts, including applicable state and County requirements, federal and tribal jurisdictions, and the County's current land use patterns and zoning framework.

Regulatory Setting

State, County, and regional requirements that govern land use planning and development in the unincorporated county are described in the following paragraphs. The statutory framework, adopted ordinances, and intergovernmental structures that shape how land use decisions are made and implemented are summarized.

State and County Frameworks

Washington's Planning Enabling Act (RCW 36.70) establishes the statewide framework for local land use planning by cities and counties, including requirements to establish a planning agency, adopt a comprehensive plan, and adopt development regulations. At a minimum, a comprehensive plan must include a land use element, a transportation element, and development regulations and zoning, (i.e., "official controls").

Washington's GMA (RCW 36.70A) establishes alternate planning requirements for counties and cities that are required (or choose) to fully plan under the GMA. Under RCW 36.70A.040, only counties that meet these specified population and growth thresholds must fully plan. The county does not meet these thresholds and is recognized by the Department of Commerce as one of Washington's 11 partially planning counties. As a partially planning jurisdiction, the County must designate and protect critical areas and designate resource lands, but is not required to implement other GMA requirements, which include expanded comprehensive plan elements, transportation concurrency, and OFM population forecasts.

Although the full suite of GMA planning goals (RCW 36.70A.020) only applies to fully planning jurisdictions, several goals provide relevant guidance for the County's plan and code updates, including property rights, permits (timely and fair processing), natural resource industries (maintain and enhance timber, agricultural, and fisheries, discourage incompatible uses), and the environment (protect air and water quality). As a partially planning jurisdiction, the County regulates critical areas and natural resource lands consistent with state statutes and Department of Commerce guidance. These protections are implemented through the County's CAPO (GHCC 18.06) and Natural Resource Lands Ordinance (GHCC 18.10).

Critical Areas

The GMA requires designation and protection of critical areas, implemented in the county through GHCC 18.06. The ordinance regulates wetlands, aquifer recharge areas, flood-prone areas, geologic hazards, and fish and wildlife habitat using best available science under WAC 365-195, protecting these resources while preserving reasonable use of property. Within shoreline jurisdiction, the County's SMP incorporates these standards by reference, providing consistent protection of critical areas along marine and freshwater shorelines. Refer also to Sections 3.3, Water Resources, and 3.4, Plants and Animals.

Natural Resource Lands

The GMA requires the County to classify and designate agricultural, forest, and mineral lands of long-term commercial significance consistent with RCW 36.70A.170 and the minimum guidelines in WAC 365-190. Designation of natural resource lands must be completed on a county-wide or area-wide basis, not parcel by parcel. In accordance with RCW 36.70A.060, development regulations must ensure that uses on lands adjacent to designated resource lands do not interfere with the continued, customary use of those lands for the commercial production of food, agricultural products, timber, or mineral extraction, and must protect the ability of resource industries to operate using BMPs.

The County has designated and mapped natural resource lands based on adopted criteria set forth in GHCC 18.10. Designated Mineral Lands, Forest Resource Lands, and Agricultural Resource Lands are shown in Figures 3.5-1, 3.5-2, and 3.5-3, respectively. These figures depict the county-wide distribution of lands identified as suitable for long-term commercial resource use..

Shorelines

Shoreline use and development are governed by the Shoreline Management Act and the state SMP Guidelines (WAC 173-26), under which the County's local SMP is approved by Ecology. The County's SMP (effective November 7, 2023), establishes shoreline environment designations and associated use/development standards, and incorporates the County's CAPO (GHCC 18.06) by reference to ensure consistent regulation of wetlands, streams, floodplains, and other critical areas within shoreline jurisdiction.

Shoreline use in the county is also shaped by SEPA, which requires environmental review for plans and development regulations. SEPA is locally administered under GHCC 18.04, which provides procedures for environmental review and integration into County decision-making.

Regional Frameworks

Regional planning in the county is also shaped by a network of intergovernmental frameworks that coordinate transportation, economic development, and land-use strategies. These partnerships support alignment among local jurisdictions, tribal governments, state agencies, and regional partners, ensuring that infrastructure investment, economic priorities, and growth management reflect shared objectives and comply with state and federal requirements.

Figure 3.5-1. Mineral Resource Lands in Unincorporated Grays Harbor County

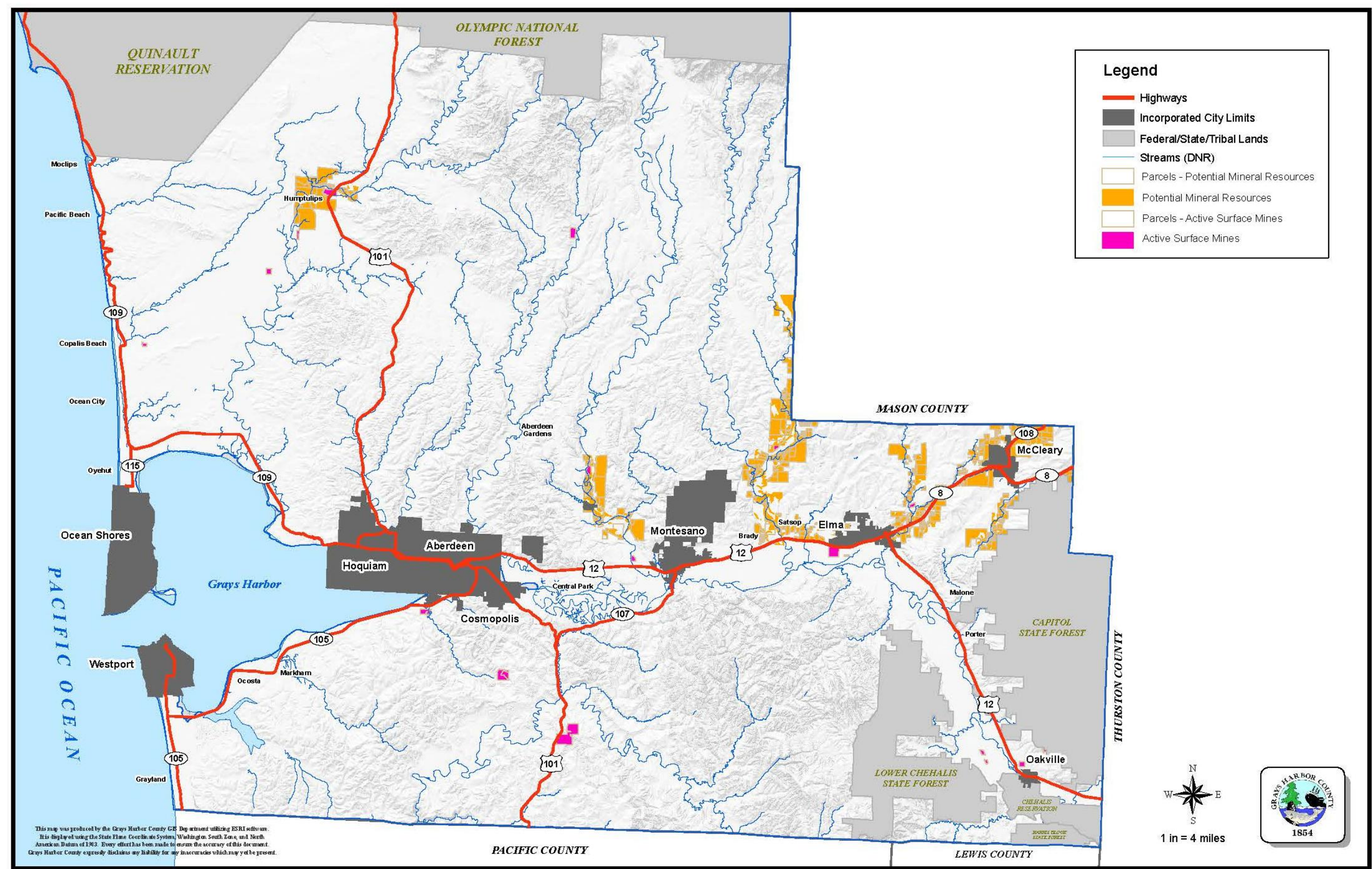


Figure 3.5-2. Forest Resource Lands in Unincorporated Grays Harbor County

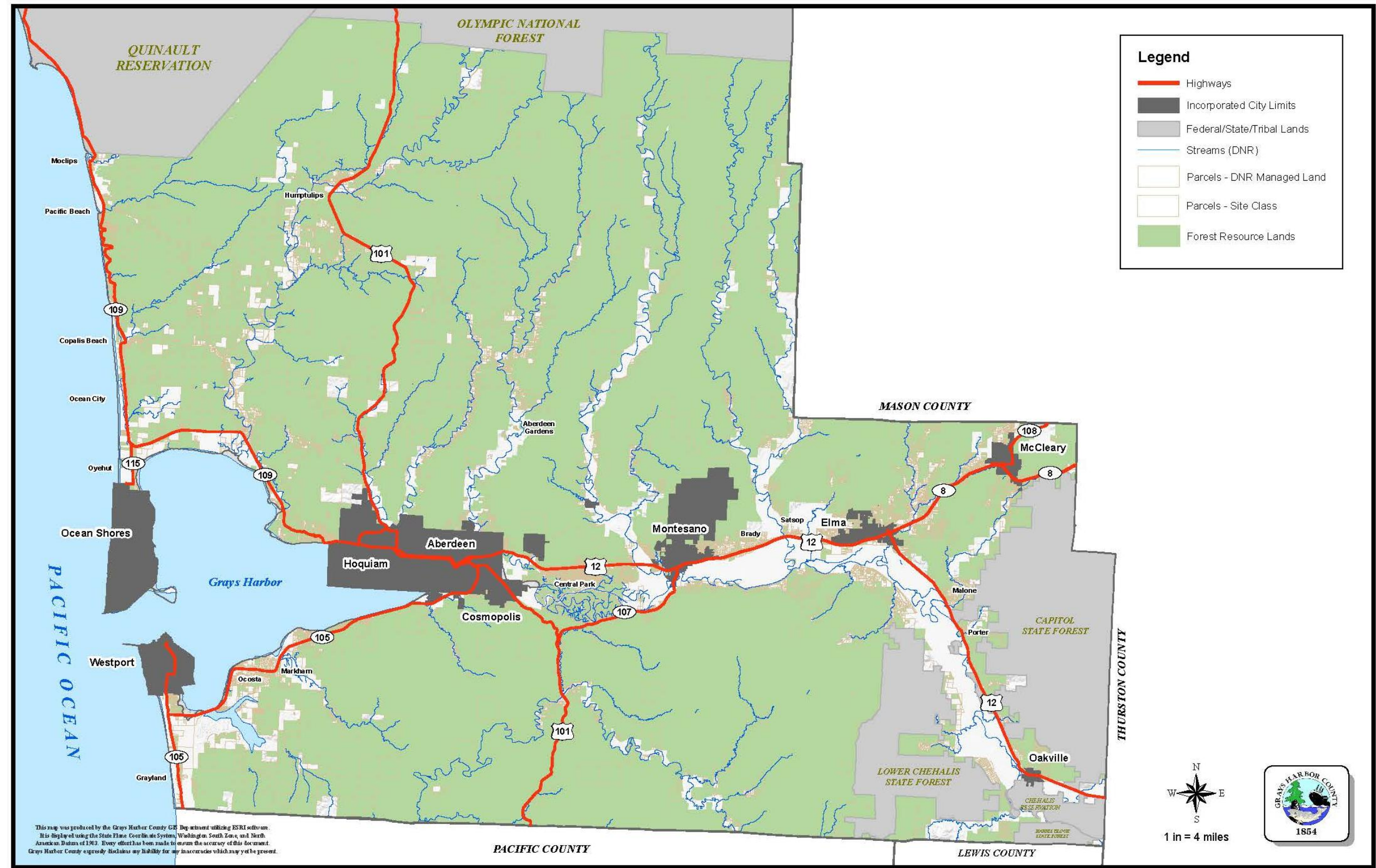


Figure 3.5-3. Agricultural Resource Lands in Unincorporated Grays Harbor County

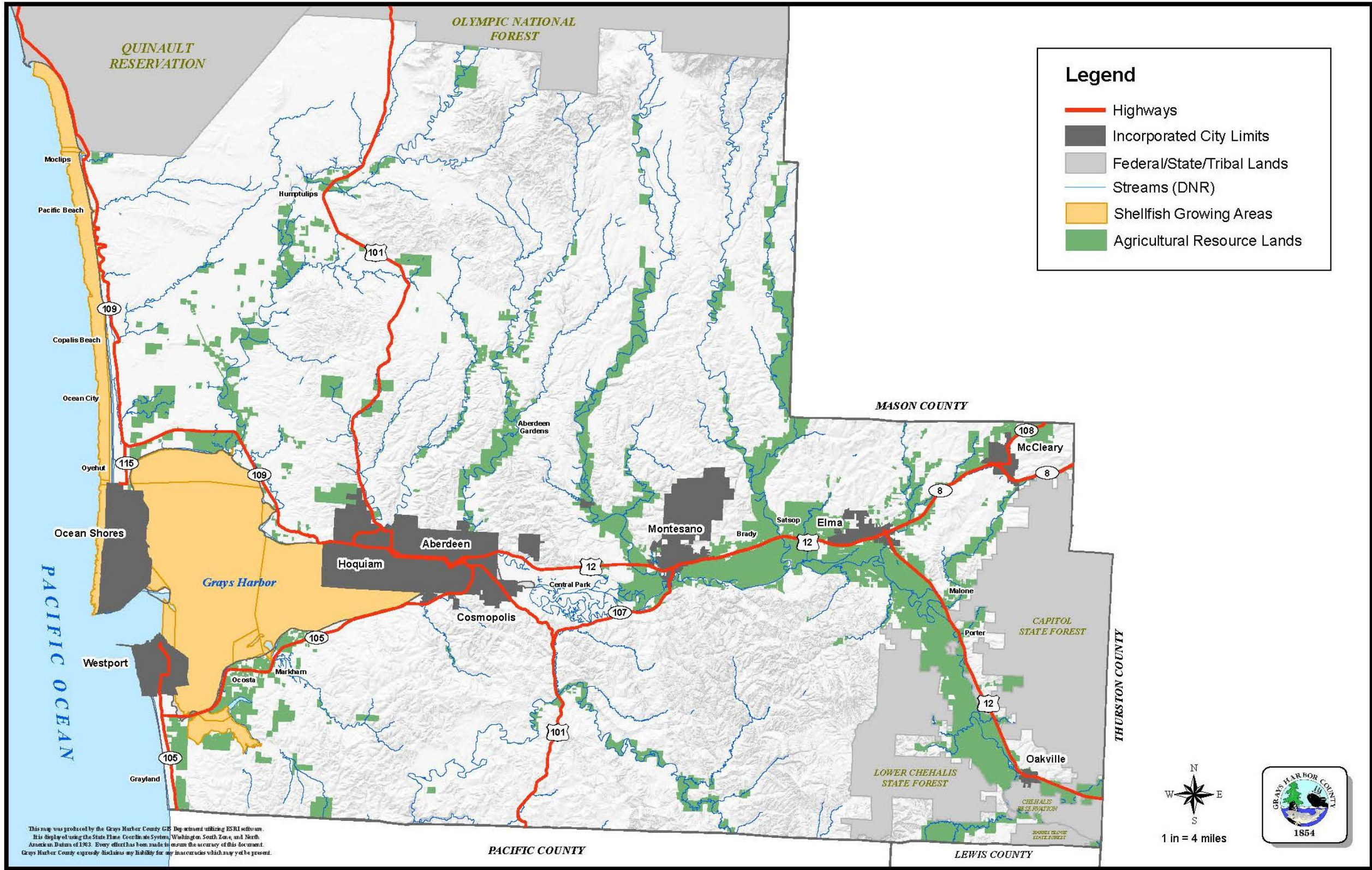
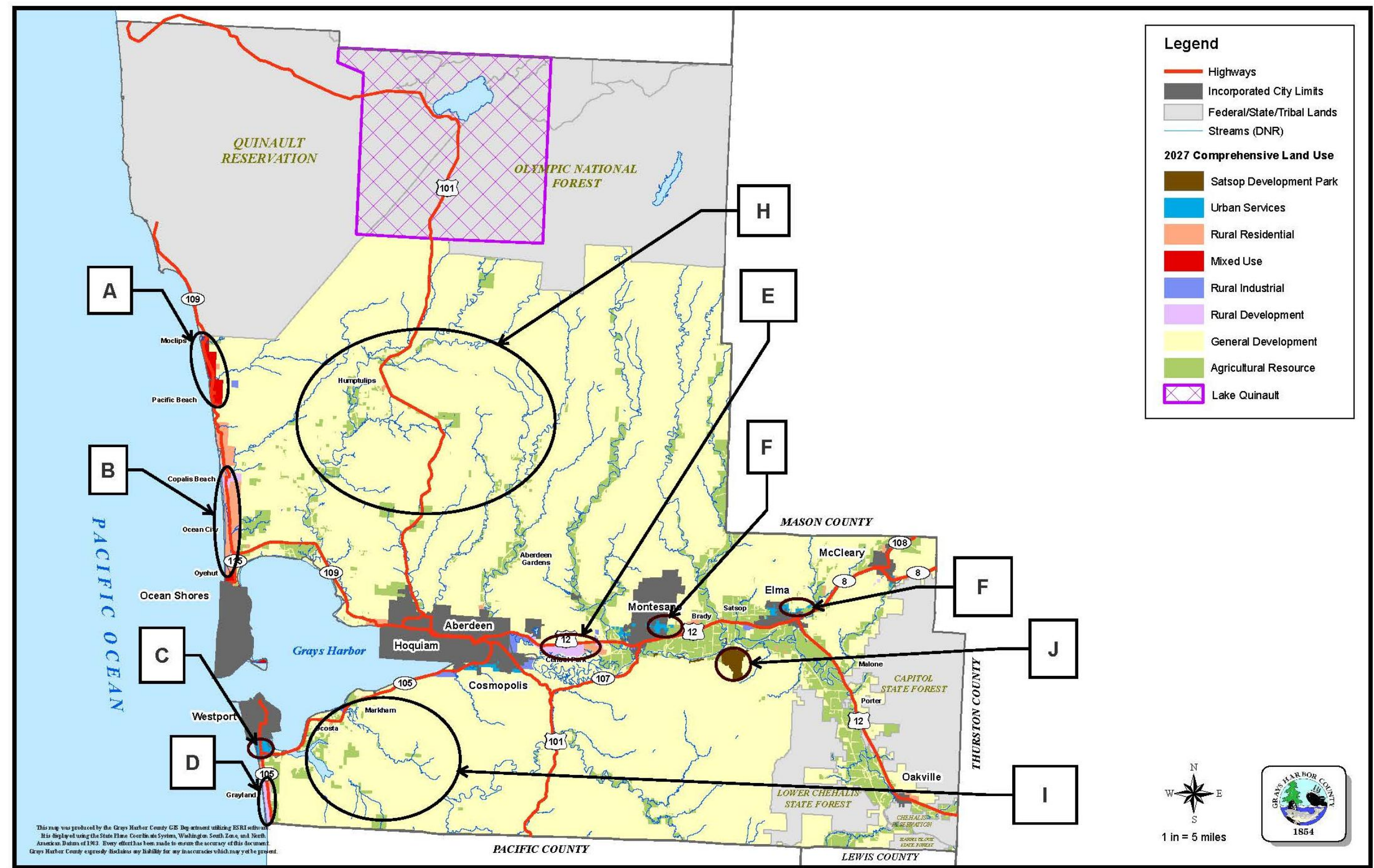


Figure 3.5-4. Unincorporated Grays Harbor County Comprehensive Land Use Designations, 2027



The Grays Harbor Council of Governments (GHCOG) serves as a regional coordinating body for planning and funding priorities. Members include cities, the Quinault Indian Nation, the Port of Grays Harbor, Grays Harbor Transit, and the County. GHCOG participates in the Southwest Washington Regional Transportation Planning Organization (SWRTPO), which coordinates transportation planning across Cowlitz, Lewis, Pacific, Wahkiakum, and Grays Harbor counties. SWRTPO develops regional transportation plans, improvement programs, and trail systems that influence land use and infrastructure decisions.

While the County is not part of a federally designated Metropolitan Planning Organization (MPO), this structure fulfills regional transportation planning obligations under the GMA and federal transportation requirements administered by the Federal Highway Administration and Federal Transit Administration.

Federal and Sovereign Jurisdictions

The following subsections describe jurisdictions where County land use designations and development regulations do not apply.

Federal Lands

A portion of Olympic National Park extends into northern Grays Harbor County. County land use designations and development regulations do not apply within Park boundaries. Coordination with the National Park Service occurs through federal planning processes, intergovernmental consultation, and project-level environmental review, rather than through local land use approvals. The Park operates under federal jurisdiction and is governed by National Park Service planning documents, including its General Management Plan, which directs resource protection, wilderness management, visitor use, and facility planning.

Tribal Lands

The Quinault Indian Nation and the Confederated Tribes of the Chehalis Reservation exercise sovereign authority over reservation land use. Coordination on cultural resources and related requirements is addressed through intergovernmental processes and is further discussed in Chapter 3.7, Cultural Resources.

Existing Condition

Existing land use conditions in unincorporated Grays Harbor County reflect the combined influence of long-standing development patterns, legacy planning documents, current zoning districts, and areas under federal or tribal jurisdiction. The following sections describe how land is presently used, designated, and regulated across the county.

Land Use Patterns

Unincorporated Grays Harbor County exhibits a mix of Urban Residential, Rural Residential, Agricultural, Forest, and Mineral Resource land uses. Development patterns are strongly influenced by topography because steep terrain throughout much of the county limits the amount of land suitable for development. Most existing development is concentrated along the coast and within the lower river valleys, where slopes are gentler and infrastructure is present. The Chehalis and Hoquiam River floodplains are among the most developed areas of the county.

In general, the existing land use pattern is less dense than what is allowed under existing zoning. A land-cover map (Figure 3.5-2) illustrates that urbanized areas are clustered near incorporated cities, while the vast majority of the unincorporated land falls within the Resource and Undeveloped land use categories (Table 3.5-1).

Figure 3.5-5. Land Cover in Unincorporated Grays Harbor County

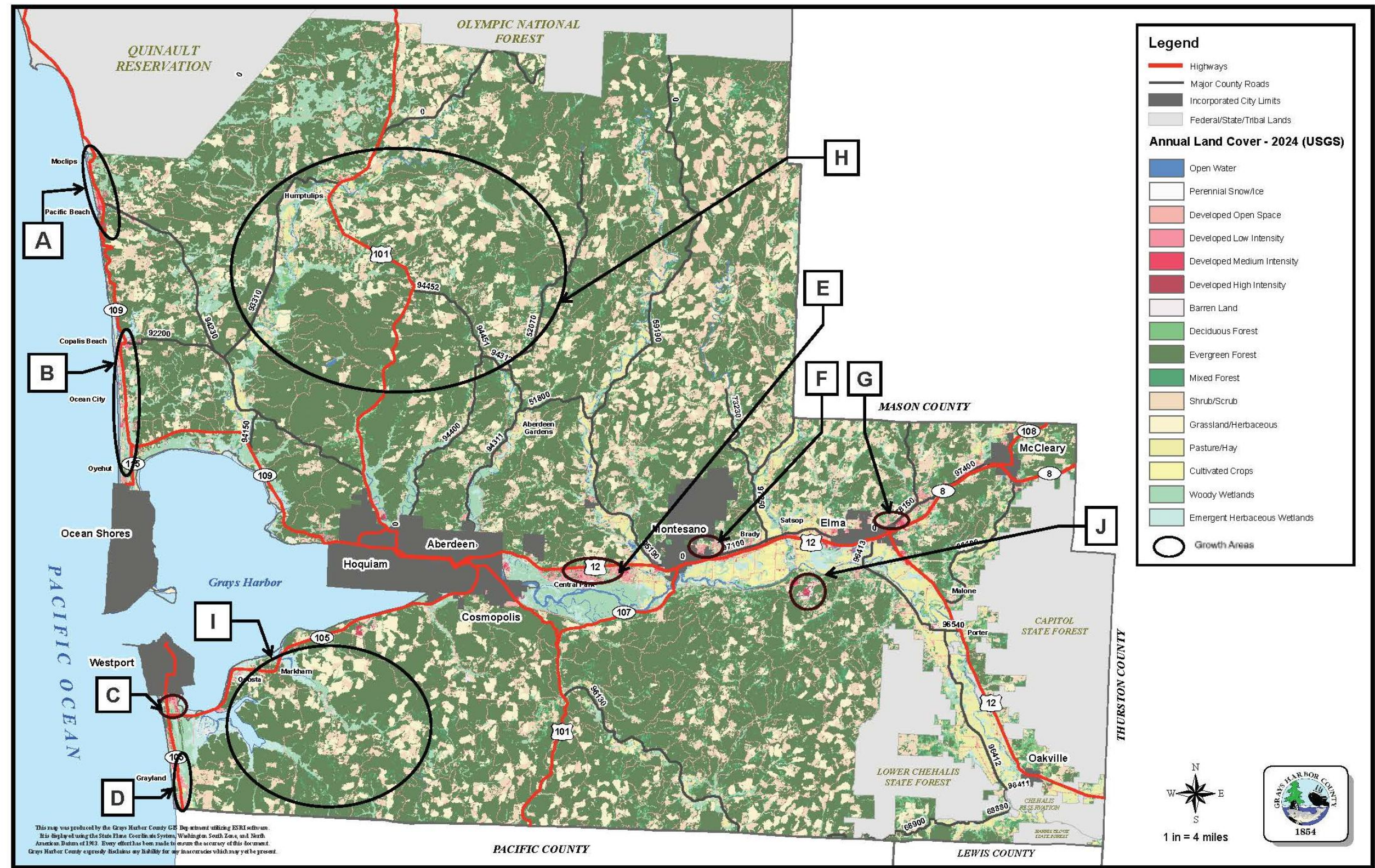


Table 3.5-1. Current Land Use Within Grays Harbor County

Land Use	Incorporated	Unincorporated	Acres	County-wide
Commercial	0.39%	0.17%	1,606.35	0.19%
Not Assigned	0.00%	0.02%	147.3	0.01%
Recreational	1.87%	0.19%	1,768.82	0.35%
Residential	40.61%	4.31%	40,909.29	7.74%
Resource	3.87%	67.76%	643,156.67	61.72%
Services	1.74%	0.14%	1,315.9	0.29%
Trade	0.30%	0.02%	185.36	0.05%
Transportation	37.63%	0.15%	1,378.63	3.69%
Undeveloped	13.58%	27.26%	258,726.29	25.96%
Grand Total	100.00%	100.00%	949,194.61	100.00%

Note: These acreages and land use classifications are derived from 2024 Grays Harbor County assessor parcel data.

Land Use Plans, Policies, and Zoning

The existing land use framework in unincorporated Grays Harbor County is based on a collection of legacy comprehensive plan documents and zoning regulations adopted over several decades. These documents guide current land use designations, zoning districts, and development review, and together form the foundation of the County's present-day planning structure.

Legacy Comprehensive Plan

The current comprehensive plan consists of legacy documents developed and adopted by the BOCC between the 1960s and 2000s. These documents form the basis for existing zoning and other development regulations. They include land use designation descriptions, criteria and maps as well as descriptions of planning efforts and policies. The policies address forestry and agriculture, growth management, protection of resource lands, rural development, industrial capacity, and inter-jurisdictional coordination. Table 3.5-2 summarizes the key topics within each of the existing land use and rural lands element planning documents and where each applies within the county.

The following documents are included in the legacy comprehensive plan. The proposed action includes adoption of a new comprehensive land use plan, which will replace the documents that comprise the Land Use and Rural Lands Element and the Resource Lands and Critical Areas Element.

- Land Use and Rural Lands Element
- Housing and Community Element
- Transportation Element (1981, 1985)
- Capital Facilities Element (2024)
- Comprehensive Flood Hazard Management Plan (2001)
- Parks Element (2026)
- Resource Lands and Critical Areas Element
- Utilities Element (1991)

Table 3.5-2. Existing Land Use and Rural Lands Element Planning Documents

Title (Year)	Applicability	Topics Addressed
Grays Harbor Planning Area (1971)	County-wide	- Population and settlement patterns - Land use map showing locations of General Development, Agricultural, Urbanizing, Recreational Residential, Industrial, and Commercial - Policies for transportation, zoning, public facilities, and economic diversification
Montesano Area Comprehensive Plan (1979)	Incorporated and unincorporated areas around the city of Montesano	- Land use descriptions, designation criteria and map for a low, moderate and High-Density Residential, Public, Semipublic, General Commercial, Heavy Commercial/Industrial, Heavy Industrial, Open Space and Agricultural/Forestry replacing designations in the 1971 plan - Policies for coordinated land use and infrastructure, directing growth to the Urban Services Area, identifying transportation and utility improvements
Agricultural Element (1981)	East County, East of the Wynoochee River and Mox-Chehalis Creek	- Agricultural lands inventory - Identification of issues impacting agricultural lands such as incompatible uses, rezones, and conversion of agricultural land - Land use descriptions, designation criteria, and associated map for Agricultural I and II, replacing agricultural designations adopted in 1971 plan - Policies to protect long-term agricultural viability of agriculture
Grays Harbor Rural Lands Study (1983)	East County, East of the Wynoochee River and Mox-Chehalis Creek	- Evaluates rural land use conditions and constraints - Land use descriptions, designation criteria, and associated land use map for Rural Residential, Rural Development, General Development, Residential and Urban Services; replacing designations adopted in 1971 plan - Policies to direct growth to suitable locations while protecting resources and managing service costs
County Industrial Lands Study (1989)	County-wide	- Evaluates the limited supply of developable industrial land and recommends updated zoning and site-selection criteria - Land use descriptions, designation criteria, and associated land use map for heavy industrial and light industrial, replacing designations adopted in the 1971 plan

Title (Year)	Applicability	Topics Addressed
		▪ Policies to direct infrastructure and permitting improvements to support economic diversification and attract new industrial development
Lake Quinault Subarea Comprehensive Land Use Plan (1999)	Lake Quinault Subarea	▪ Sets a community vision for the Lake Quinault subarea ▪ Policies for land use, coordination with County–tribal–federal partners, and housing and economic opportunities replacing the 1971 plan ▪ Recommends new Lake Quinault Rural Residential zoning district
Satsop Development Master Plan (2007)	Satsop Development Master Plan Subarea	▪ Establishes a 20-year framework to redevelop the former Satsop nuclear site into a diversified employment center with seven planning areas for industrial, office, research, multi-use, and conservation functions ▪ Policies supporting new zoning, design standards, infrastructure planning, and long-term environmental stewardship
Damon Point Ordinances 381 and 383 (2009)		▪ Applies conservation-oriented land use and shoreline designations to the Damon Point Multiple Use Area, as updated by Damon Point Ordinances 381 and 383

Existing Land Use Designations

The existing land use designations in unincorporated Grays Harbor County are derived directly from the legacy of comprehensive plan documents described in Table 3.5-3. These designations translate the County’s historical planning policies into mapped categories that define how land is currently classified for planning and development purposes. Although developed over several decades and through multiple planning efforts, the designations continue to guide present-day land use review, inform zoning, and influence development patterns in rural and resource-dependent areas.

The existing Land Use and Rural Element documents divide unincorporated Grays Harbor County into 14 comprehensive plan land use designations:

- Agricultural
- Agricultural I
- Agricultural II
- General Development
- General Development Area
- Industrial
- Lake Quinault
- Recreational Residential
- Residential
- Rural Development
- Rural Residential
- Satsop Development Park
- Urban Services
- Urbanizing

These designations establish the baseline framework for interpreting existing land uses and for applying the zoning districts that implement them in GHCC Title 17 (Zoning Code).

Land Use Zoning Districts

The County's zoning framework organizes the unincorporated area into a series of land use districts that implement the County's planning objectives and guide where residential, commercial, industrial, agricultural, and resource-based activities may occur. These districts translate the County's legacy planning documents and subarea plans into regulatory designations that manage development intensity, protect working lands and natural resources, and support the unique needs of rural communities and specialized areas such as Lake Quinault and the Satsop Development Park. Table 3.5-3 summarizes the purpose of each land use designation as defined in GHCC Title 17, providing the regulatory foundation for current land use review and development decisions.

Table 3.5-3. Existing Zoning Districts in Grays Harbor County

Zone	Name	Purpose
A-1	Agricultural Use District	To conserve and protect agricultural land and to reserve areas for use by small to moderate scale farming activities.
A-2	Long-Term Agricultural Use District	To encourage the conservation and protection of agricultural lands and to reserve areas for use by large commercial farms.
G-1	General Development One District	To encourage, strengthen, and revitalize rural development centers as identified in the adopted comprehensive plan. The district permits a wide variety of uses with provisions intended to ensure the compatibility of uses within the rural centers and their continued attractiveness for development.
G-5	General Development Five District	To permit a wide range of rural uses at densities supported by available public facilities, services, and site conditions, while ensuring compatibility between neighboring land uses.
R-1	Restricted Residential	To support single-family dwellings, combining a low population density with a high degree of protection against objectionable influences, building congestion, and lack of light, air, and privacy.
R-2	General Residential	To support residential use with protection from objectionable influences.
R-3	Resort Residential	To permit recreational type residential as well as conventional residential.
RR	Rural Residential	To permit rural residential development at densities supported by available public facilities, services, and land capability, while protecting these areas from objectionable influences.
LQ	Lake Quinault District	To support residential and economic diversity and growth in the communities of Lake Quinault and Neilton as provided in the Lake Quinault subarea comprehensive land use development plan.

Zone	Name	Purpose
C-2	General Commercial	To provide for the wide range of uses commonly found in a retail business area.
I-1	Light Industrial	To provide for the establishing of industries distinguished from major fabrication, in which uses are largely devoid of nuisance factors, hazards, or exceptional demands upon public facilities and services, and to establish a land use pattern advantageous to the specialized needs of the uses permitted in this district.
I-2	Industrial District	To provide areas for industrial activities involving processing, fabrication, and storage; allow supportive commercial uses; and protect industrial operations from incompatible or disruptive uses.
SD	Satsop Development	To promote economic development by supporting unique and specialized industries within areas of the Satsop Development Park designated for intensive development in the adopted master plan.
SM	Satsop Multi-Use	To allow stewardship-focused education, recreation, habitat preservation, utility access, and compatible economic uses in designated Satsop multi-use areas at limited intensities that protect sensitive resources.

Source: Jacobs 2025.

3.5.2 Potentially Significant Impacts

The following examines to what extent the proposed changes in development intensity and activity levels are compatible with land uses in the existing plans. Also considered will be whether each alternative will require a change to existing plans or zoning.

Methods of Analysis

This land use analysis relies on a qualitative, high-level comparison of future land uses for each alternative. It includes an approximate estimate of projected land demand by land use designation, informed by forecast population and housing needs, to assess whether the land base under each alternative is generally sufficient to accommodate anticipated growth and any resulting impacts on land use, plans, or policies. The comparative analysis is based on the following assumptions:

- Consistency with plans, policies, and development regulations is evaluated based on the magnitude of changes to those plans, policies, and regulations.
- Future development is assumed to be distributed in the same general patterns and areas as in the past. Between 2015 and 2025, approximately half of all development occurred in urbanizing areas, about one-quarter occurred in General Development, and the remainder was distributed across Rural Residential, Rural Development, Agricultural Resource, and Lake Quinault designations.

- Undeveloped land consists of parcels listed as Land Use Code 91 – Undeveloped Land in the 2024 Grays Harbor County Assessor parcel data file. “Undeveloped” does not necessarily mean available or suitable for development.
- Acres needed are based on average achieved densities in each proposed land use designation, with limited adjustments. Achieved densities are derived from Grays Harbor County permit data from 2015–2025. Allowed, achieved, and assumed values are shown in Table 3.5-4.

Table 3.5-4 Allowable, Achieved, and Assumed Density by Land Use Designation

Land Use Designation	Allowed Density Dwelling Units	Past Achieved Density 2015-2025	Assumed Density for Land Use Need
Agricultural Resource	1 DU/20 acres to 1 DU/10 acres	1 DU/16.6 acres	1 DU/16.6 acres
Lake Quinault	1 DU/2 acres	1 DU/2 acres	1 DU/2 acres
General Development	1 DU/ 5 acres	1 DU/10 acres	1 DU/5 acres
Rural Development	1 DU/5 acres to 1 DU/1 acre	1 DU/2 acres	1 DU/2 acres
Rural Residential	1 DU/1 acre to 6 DU/1 acre	1 DU/4.3 acres	1 DU/4.3 acres
Mixed-Use	1 DU/1 acre to 20 DU/1 acre	12 DU/1 acre	12 DU/1 acre
Urban Services	1 DU/1 acre to 20 DU/1 acre	1 DU/3.5 acres	1 DU/2 acres

DU = dwelling unit

Impacts Common to All Alternatives

Across all alternatives, common impacts include growth-related demand for housing and sites, plan and zoning updates, conversion of vacant or underutilized parcels, higher activity levels (especially in Urban Services and Mixed-Use areas), localized compatibility concerns at land use interfaces, and continued development pressure in shoreline areas regulated under the SMP. Impacts beyond effects common to all are described in the next section specific to each alternative.

Changes to Plans, Policies, and Zoning

Updates to the County’s planning framework would occur under all alternatives, providing the foundation for how future development is organized and reviewed. These changes include the adoption of a new comprehensive land use plan, consolidation of existing designations, and corresponding updates to zoning and development regulations. All proposed alternatives would be consistent with GMA requirements.

Under all alternatives, the 2027 Comprehensive Land Use Plan and map would be adopted to replace legacy planning documents that comprise the existing Land Use and Rural Element. The

new land use designations would generally follow the existing pattern established in those documents and in existing zoning. Designations and designation criteria would be consolidated and made consistent county-wide. For example, the “General Development” designation in the west county (Grays Harbor County Planning Department 1971) and the “General Development Area” designation in the east county (Grays Harbor County Planning Department 1983) would be consolidated into a single “General Development” designation that applies throughout the county. Zoning districts that implement each designation would also be consolidated based on the purpose and intent. A comparison of existing and proposed designations and zoning is found in Table 3.5-5.

In addition, zoning and development regulations in GHCC Titles 16, 17, and 18 will be amended to be consistent with the 2027 Comprehensive Land Use Plan. Development regulations for critical areas and natural resource lands will be updated consistent with the requirements of the GMA.

Table 3.5-5. Existing and Proposed Land Use Designations and Implementing Zones

Proposed New Designation	Existing Designation	Implementing Zones
Agricultural Resource	Ag, Ag I, Ag II	Ag-1 and Ag-2
General Development	General Development Area, General Development	General Development-5
Lake Quinault	Lake Quinault	LQ - Lake Quinault
Rural Development	Resort Residential, Rural Development	G1 - General Development, C2 General Commercial, RR - Rural Residential, G5- General Development 5
Rural Industrial	Urban Services, Urbanizing or Industrial	Light Industrial (I-1) or Industrial District (I-2)
Rural Residential	Rural Residential, Residential	Rural Residential District (RR), R-1 or R-2
Satsop Development Park	Satsop Development Park	SM - Satsop Multi-use, SD - Satsop Development
Urban Services	Urban Services or Urbanizing	Restricted Residential District (R-1), General Residential District (R-2), Resort Residential (R-3), General Commercial District (C-2), Light Industrial (I-1) or Industrial District (I-2), or new Mixed-Use Zone
Mixed-Use	Urban Services or Urbanizing	General Commercial District (C-2), New Mixed-Use Zone, Restricted Residential District (R-1), General Residential District (R-2), Resort Residential (R-3)

Growth of Population, Housing, and Employment

Population is anticipated to increase under all alternatives, and new residents will require additional housing, employment opportunities, and community services (Table 3.5-6). Although the amount of growth varies by alternative, roughly half of all development would continue to occur within existing urbanizing areas and the other half would be dispersed county-wide. As growth occurs, additional land would be dedicated to Residential, Commercial, or Industrial uses, and currently vacant or underutilized parcels may convert to more intensive development. Redevelopment of existing lots could also occur where zoning allows higher densities or changes in use. Refer to Section 3.6, Population, Housing, and Employment, for more information.

Table 3.5-6. Undeveloped Land and Land Use Need by Designation and Alternative

Land Use Designation	Total Acres	Undeveloped ^[a] Acres	Acres Needed		
			Alternative 1	Alternative 2	Alternative 3
Agricultural Resource	74,271	18,427	176	1,223	2,270
General Development	628,366	48,499	265	1,842	3,419
Lake Quinault	72,879	837	8	59	109
Rural Development	3,416	822	75	339	604
Rural Industrial	1,973	857	0	0	0
Rural Residential	6,485	1,647	91	634	1,176
Satsop Development Park	1,760	776	256	256	256
Urban Services	2,433	572	105	433	761
Mixed-Use	2,012	1,246	16	53	90
Total	793,595	73,685	992	4,839	8,685

^[a] Assessor Land Use Code 91- Undeveloped Land

Conversion of Uses

Under all alternatives, adoption of the proposed Comprehensive Plan would not directly convert existing land uses; however, future development accommodated under each alternative could result in the transition of vacant, undeveloped, or underutilized parcels to more intensive uses. Such conversions may involve temporary construction impacts and longer-term operational effects, including increased traffic, noise, light, and glare, and additional development pressure on adjacent parcels.

Changes in Activity Levels and Patterns

All alternatives would result in changes to land use intensity and activity patterns as new development occurs. These changes would be most pronounced in areas designated as Mixed-Use and Urban Services, where higher densities and more intense uses are allowed. While the magnitude of change varies among alternatives, each would experience increased activity associated with population and employment growth.

Land Use Compatibility

Each alternative has potential to create localized incompatibilities as new development occurs or as existing areas redevelop at higher intensities. Conflicts may arise where different use types meet—such as industrial or commercial development adjacent to Residential areas—or at the interface between urbanized land and rural or resource lands. Potential compatibility concerns include noise, odor, truck traffic, lighting, and other operational characteristics associated with more intensive land uses. Differences in intensity and land use may be most extreme where General Development and Agricultural designated areas abut Mixed-Use or Urban Services designations.

Shoreline Development

Shoreline areas may continue to attract development due to their aesthetic and recreational value, which can alter shoreline character or affect shoreline ecological functions. Development in these areas may also influence adjacent land use patterns or diminish shoreline-dependent recreational and habitat values. The County's SMP establishes requirements for uses, densities, setbacks, and open space within shoreline jurisdiction. Proposed land use designations, policies, and zoning under all alternatives would be consistent with the SMP.

Impacts by Alternative

Alternative 1: No Action

Under the No Action Alternative, land use and development patterns would remain generally similar to past trends. Only limited changes in land use intensity or parcel conversion would be expected, and activity levels would increase only modestly compared to today. Table 3.5-7 summarizes the primary impacts anticipated under this alternative.

Table 3.5-7. Potential Land Use Impacts of the No Action Alternative

Impact	Description
Conversion of Uses	▪ Less land would be needed to accommodate growth due to the lowest growth allocations. ▪ Lot patterns would shift as development reaches adopted zoning maximums, reducing the supply of vacant land. ▪ No conversion of existing agricultural land would occur.
Changes in Activity Levels	▪ Increases in activity levels would occur primarily within cities and urbanizing areas designated Mixed-Use and Urban Services. ▪ As development occurs, secondary effects could include higher demand for public services and changes in aesthetic character.
Land Use Compatibility	▪ New industrial or commercial development could result in localized compatibility conflicts with existing uses.
Plans, Policies, and Zoning	▪ Changes to land use designations and zoning within city water and service areas may require updates to city plans and policies.

Alternative 2: Moderate Growth

Under the Moderate Growth Alternative, land use and development would occur at rates nearly twice those experienced in the past. Some Rural Residential Areas would transition to higher-density Mixed Uses within the Mixed-Use and Urban Services designations, and Rural Development could occur on smaller lots than historically developed. Larger rural parcels may also redevelop as demand increases. Table 3.5-8 summarizes the potential impacts associated with this alternative.

Table 3.5-8. Potential Land Use Impacts of the Moderate Growth Alternative

Impact	Description
Conversion of Uses	▪ Undeveloped land would be converted to housing throughout the county. ▪ Infill could occur where existing development is below allowed densities, resulting in higher densities or different housing types than currently present. ▪ The supply of vacant lots would shrink. ▪ Lot patterns would shift as development reaches adopted zoning maximums, reducing the amount of vacant, partially developed, and re-developable land.
Changes in Activity Levels	▪ Higher densities in Urban Services and Mixed-Use areas could increase ambient noise, traffic, and general activity associated with new housing and construction.
Land Use Compatibility	▪ Land use incompatibilities such as noise or odor from new Commercial or Industrial uses may occur where Urban Services and Mixed-Use areas interface with adjacent Rural Residential and General Development areas.
Plans, Policies, and Zoning	▪ Changes to land use designations and zoning within city water and service areas may require updates to city plans and policies.

Alternative 3: High Growth

Land use and development would occur at rates significantly higher than in the past. There would be significant conversion of rural uses to higher density mixed uses in the Mixed-Use and Urban Services designations. In urban services designations there would be insufficient land for development at current densities, which could result in smaller lot sizes and more intense use of the land. In rural areas, development pressure would increase and development would occur at densities consistent with zoning but higher than has occurred in the past. Impacts are described in Table 3.5-9.

Table 3.5-9. Potential Land Use Impacts of the High Growth Alternative

Impact	Description
Conversion of Uses	▪ Insufficient land designated as urban services could lead to conversion of lower-density designations—such as Rural Residential or General Development—to Urban Services. ▪ The supply of vacant lots would shrink, and development would increase on partially developed and re-developable properties.
Changes in Activity Levels	▪ Higher development densities and intensities in urban services areas may result in notable increases in ambient noise, traffic, and general activity. ▪ Significant construction activity related to new roads and utilities may occur to support Commercial uses and higher-density development in Urban Services and Mixed-Use areas. ▪ Rural areas may also experience increased activity on partially developed and re-developable properties as development occurs at higher densities than in the past.
Land Use Compatibility	▪ Incompatibilities such as noise or odor associated with higher densities or new Commercial or Industrial uses may occur where Urban Services and Mixed-Use areas interface with Rural Residential and General Development areas.
Plans, Policies, and Zoning	▪ Changes to land use designations and zoning within city water and service areas may require updates to city plans and policies. ▪ Development regulations may need to be amended to encourage more efficient use of land and higher densities in urban services areas, potentially including allowances for greater building heights, a wider variety of housing types, smaller lot sizes, and increased lot coverage.

3.5.3 Avoidance, Minimization, and Mitigation

Land use impacts can be avoided, minimized, and mitigated by adopting the proposed Comprehensive Plan policies, zoning, and development regulations.

Incorporated Plan Features

The plan incorporates several features intended to align future development with established land use patterns and minimize incompatible uses. New land use designations are based on the county's existing development patterns, reducing the magnitude of change across designations and helping to avoid conflicts between adjacent uses. Plan policies also include measures to protect critical areas and natural resource lands, and encourage a variety of housing types, a range of densities, and more efficient use of land. In addition, land use designation criteria are structured to prevent uses that would be inconsistent with the SMP.

Applicable Regulations and Commitments

The County's development regulations for unincorporated lands—contained in GHCC Titles 16, 17, and 18—establish allowed and prohibited uses and set standards for new development, including allowable densities and minimum lot sizes. The SMP regulates development within shoreline jurisdiction to protect sensitive shoreline areas from impacts associated with new construction, and any projects occurring within SMP jurisdiction under the proposed Comprehensive Plan would be required to comply with SMP standards. The County's CAPO governs development in environmentally sensitive areas, requiring proposed projects to meet CAPO requirements and implement measures necessary to protect critical area functions. The CAPO is also subject to update as part of the County's periodic review process.

Other Potential Mitigation Measures

Impacts from incompatible uses could be mitigated by amending development regulations in GHCC Titles 16, 17, and 18. Amendments could include new or additional development standards such as setbacks or landscaping, or changes to allowable uses.

3.5.4 Significant Unavoidable Adverse Impacts

Over time, implementation of any of the alternatives would irreversibly commit vacant, partially developed, and redeveloped properties to additional or new single-family, multi-family, commercial, retail, and industrial uses. Under all alternatives, areas designated Mixed-Use and Urban Services would continue to experience development and gradual urbanization, while rural areas would remain lower-density and rural in character.

The greatest potential for significant impact to land use and shoreline patterns would occur under Alternative 3, which accommodates the highest levels of growth in both rural and urbanizing areas. In Mixed-Use and Urban Services areas, development intensity would increase, and the character of these areas would shift from suburban to more urban, with higher densities and a wider variety of housing types. In rural areas, increased development pressure could alter rural character if growth results in smaller lot sizes than have occurred historically.

3.6 Population, Housing, and Employment

This section provides information about current population, housing, and employment levels in unincorporated county areas, cities, and non-city areas. It also assesses potential impacts of the alternatives on population, housing and employment county-wide. The affected environment is the entire county, including all nine cities and the unincorporated county areas.

The study area is defined by the County's jurisdictional boundaries.

3.6.1 Affected Environment

Regulatory Setting

Grays Harbor County is considered “partially planning” under the GMA (RCW 36.70A) because its population growth rate was below the 17% threshold for mandatory fully planning. As a partially planning county, the County must comply with certain GMA requirements; however, no population or housing related planning requirements apply. Specifically, partially planning counties are not required to comply with the following GMA requirements related to population and housing:

- Inventory and analyze existing and projected housing needs (RCW 36.70A.070)
- Identify sufficient capacity for housing (RCW 36.70A.070)
- Designate urban growth areas (RCW 36.70A.110)
- Allocate population forecast by the OFM (RCW 36.70A.110)
- Provide sufficient land capacity for development (RCW 36.70A.115)

Existing Conditions

The analysis is based on population and demographic data from the Washington State OFM (2024), the U.S. Census Bureau 2020 Decennial Census and the 2024 American Community Survey (ACS). Data from 2024 represents the most recent data available at the time this analysis was conducted.

Population

In 2024, the county had a total population of 77,400 people (Table 3.6-1). Most residents (62%) lived within incorporated cities, while more than one-third (38%) resided in unincorporated county areas. The most populous cities were Aberdeen, Hoquiam, and Ocean Shores. The unincorporated area overall has a larger population than any one incorporated area.

Table 3.6-1. Total Population in Unincorporated and Incorporated County, 1970 to 2024

Jurisdiction	1970	1980	1990	2000	2010	2015	2020	2024
Unincorporated County	20,836	24,627	24,603	26,245	28,438	28,475	28,675	29,420
Aberdeen	18,489	18,739	17,050	16,290	16,896	16,780	16,890	17,100
Cosmopolis	1,599	1,575	1,545	1,545	1,649	1,640	1,695	1,680

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Jurisdiction	1970	1980	1990	2000	2010	2015	2020	2024
Elma	2,227	2,720	2,420	3,050	3,107	3,135	3,410	3,505
Hoquiam	10,466	9,719	9,020	8,820	8,726	8,575	8,540	8,800
McCleary	1,265	1,419	1,515	1,530	1,653	1,680	1,815	2,085
Montesano	2,847	3,247	3,270	3,575	3,976	4,095	4,175	4,135
Oakville	460	537	580	700	684	685	695	720
Ocean Shores	0	1,777	2,262	3,270	5,569	5,935	6,690	7,630
Westport	1,364	1,954	1,935	2,075	2,099	2,110	2,135	2,325
Total Population	59,553	66,314	64,200	67,100	72,797	73,110	74,720	77,400

Source: OFM 2025b.

Population Growth

Between 1970 and 2024, the county's population grew from 59,553 people to 77,400, an average growth rate of 0.6% per year, or roughly 6% per decade (Table 3.6-2). Between 2015 and 2024, the county added 4,290 residents. Growth patterns over the last decade were influenced by broader socioeconomic events. Following the recession (2008–2010), the county experienced slower than normal growth through 2020. After the first year of the COVID-19 pandemic (2020–2021) the county experienced faster than normal growth. Even with these socioeconomic events, the county maintained a consistent growth rate of 0.6% per year from 2015 to 2024.

Table 3.6-2. Average Annual Population Growth Rate by Jurisdiction, 2015 to 2024

Jurisdiction	2010-2015	2015-2020	2020-2024	Average Annual Growth Rate 2015-2024
Unincorporated County	0.0%	0.1%	0.5%	0.3%
Aberdeen	-0.1%	0.1%	0.2%	0.2%
Cosmopolis	-0.1%	0.7%	-0.2%	0.2%
Elma	0.2%	1.8%	0.6%	1.2%
Hoquiam	-0.3%	-0.1%	0.6%	0.3%
McCleary	0.3%	1.6%	3.0%	2.5%
Montesano	0.6%	0.4%	-0.2%	0.1%
Oakville	0.0%	0.3%	0.7%	0.5%
Ocean Shores	1.3%	2.5%	2.8%	3.0%
Westport	0.1%	0.2%	1.8%	1.0%
County-wide	0.1%	0.4%	0.7%	0.6%

Source: OFM 2025b.

Some cities grew faster than the county as a whole, including Elma (1.2%), McCleary (2.5%), Ocean Shores (3%), and Westport (1%). Among these, McCleary, Ocean Shores, and Westport have shown upward trends in their annual growth rates, suggesting that future growth rates may exceed the 2015–2024 average annual growth rate (Table 3.6-3).

As the total county population increases, each city's proportionate share of the total population also increases. Since 2015, most cities have maintained a consistent share within $\pm 1\%$, with the exception of Ocean Shores, which increased its share by 2%, indicating that it is attracting a larger portion of the county-wide population than it has in the past.

Table 3.6-3. Population Share Change in Unincorporated and Incorporated County, 2015 to 2024

Jurisdiction	Population Share			
	2015	2020	2024	2015-2024 Change
Unincorporated County	39%	38%	38%	-1%
Aberdeen	23%	23%	22%	-1%
Cosmopolis	2%	2%	2%	No change
Elma	4%	5%	5%	+1%
Hoquiam	12%	11%	11%	-1%
McCleary	2%	2%	3%	+1%
Montesano	6%	6%	5%	-1%
Oakville	1%	1%	1%	No change
Ocean Shores	8%	9%	10%	+2%
Westport	3%	3%	3%	No change
Total	100%	100%	100%	

Source: OFM 2025b.

Housing

Units and Tenure

As of 2024, the county had a total of 37,549 housing units, of which 13,294 (35%) were located in unincorporated county areas (OFM 2025a). Between 2015 and 2024, the County permitted 1,243 housing units in the unincorporated areas, averaging housing growth of approximately 124 units per year (Grays Harbor County Planning and Building Division 2025).

Occupied housing units are categorized as either owner-occupied or renter-occupied, a distinction known as "tenure." Tenure helps to determine how future housing demand may differ for owner-occupied and renter-occupied units. County-wide, and in the unincorporated area, 82% of housing units are occupied and 18% are vacant (Table 3.6-4). Nearly three-quarters of all occupied housing units are owner-occupied, but owner occupancy rates vary significantly among jurisdictions. The unincorporated area has higher owner occupancy rate than the cities and the county as a whole.

Table 3.6-4. Housing Occupancy and Tenure in Unincorporated and Incorporated County, 2023

Jurisdiction	Total Housing Units	Percent Total Housing	Occupancy Rate	Occupancy Type	
				Owner	Renter
Unincorporated County	12,562	34%	82%	86%	14%
Aberdeen	7,051	19%	91%	57%	43%
Cosmopolis	895	2%	87%	81%	19%
Elma	1,350	4%	91%	63%	37%
Hoquiam	4,066	11%	92%	58%	42%
McCleary	1,039	3%	88%	79%	21%
Montesano	1,858	5%	87%	65%	35%
Oakville	336	1%	88%	83%	17%
Ocean Shores	5,691	16%	65%	83%	17%
Westport	1,720	5%	59%	58%	42%
Total County	36,568	100%	82%	73%	27%

Source: Census 2023.

Note: Homeowner vacancy rate is the percent available for sale and rental vacancy rates are the percent available for rent.

Vacancy Rates

Housing vacancy rates indicate the availability of units for ownership or for rent. Vacancy rates below 5% generally indicate a need for additional housing supply for ownership or rental.

Table 3.6-5 compares vacancy by housing type in unincorporated county compared to incorporated areas and the county as a whole.

Table 3.6-5. Percent Vacancy by Housing Type in Incorporated and Unincorporated County, 2023

Jurisdiction	Percent Housing Vacant	Vacancy by Housing Type			
		For Rent	For Sale	Seasonal/Recreation, Occasional Use	Other
Unincorporated County	18%	0%	0%	13%	4%
Aberdeen	9%	3%	0%	0%	7%
Cosmopolis	13%	2%	2%	2%	7%
Elma	9%	0%	0%	0%	9%
Hoquiam	8%	0%	0%	1%	7%
McCleary	12%	8%	1%	1%	3%
Montesano	13%	0%	0%	3%	10%

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Jurisdiction	Percent Housing Vacant	Vacancy by Housing Type			
		For Rent	For Sale	Seasonal/Recreation, Occasional Use	Other
Oakville	12%	0%	0%	0%	12%
Ocean Shores	35%	0%	1%	31%	3%
Westport	41%	1%	2%	34%	4%
Total County	18%	1%	0%	11%	5%

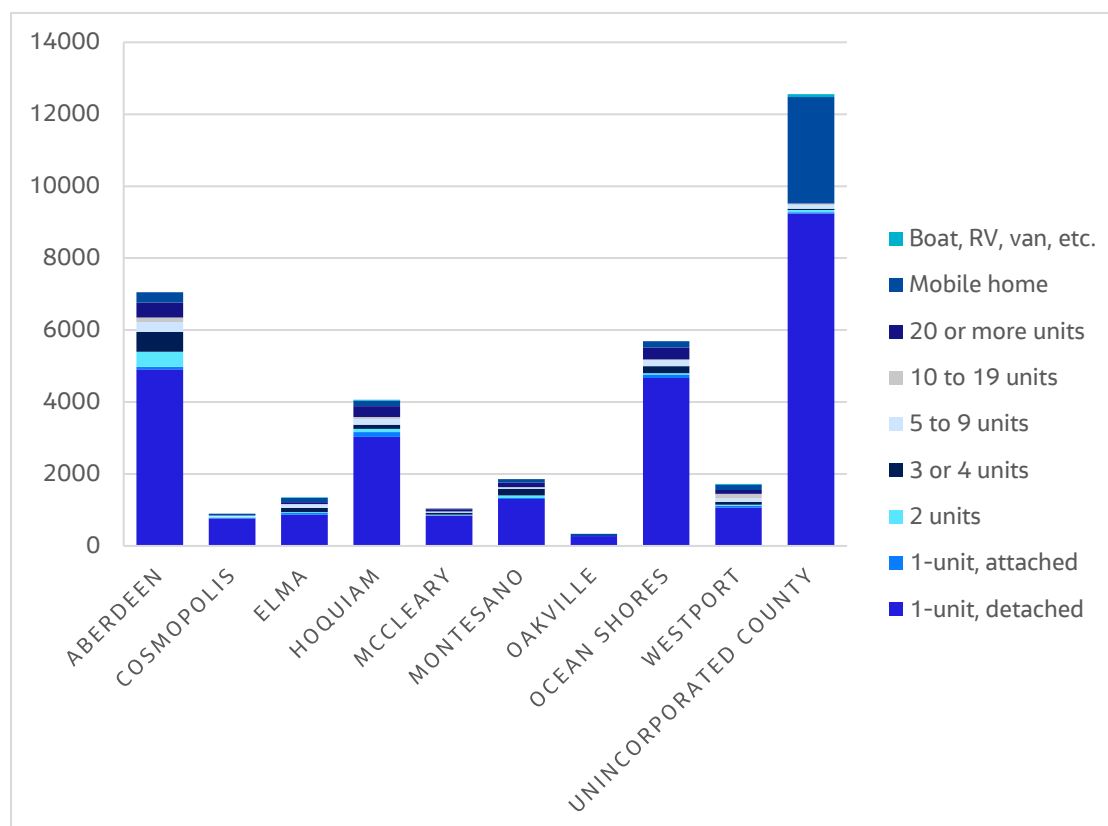
Source: Census 2023.

In the county, housing vacancy rates are higher than the statewide average of 7.3%; however, most vacant units are used for seasonal, recreational, or occasional use and are not available for rent or purchase. County-wide, only 1% of the total housing stock is vacant for rent, while 11% is vacant and used for seasonal or recreational use. In unincorporated areas, less than 1% of total housing is vacant for rent and 13% is for seasonal or recreational use (Census 2023).

Housing Types and Age

Throughout the county, the most predominant housing type is single-family dwellings (74%), followed by manufactured homes (23%). Only 2% of the total housing stock is in multi-family structures (Census 2023). Figure 3.6-1 compares the housing structures county-wide.

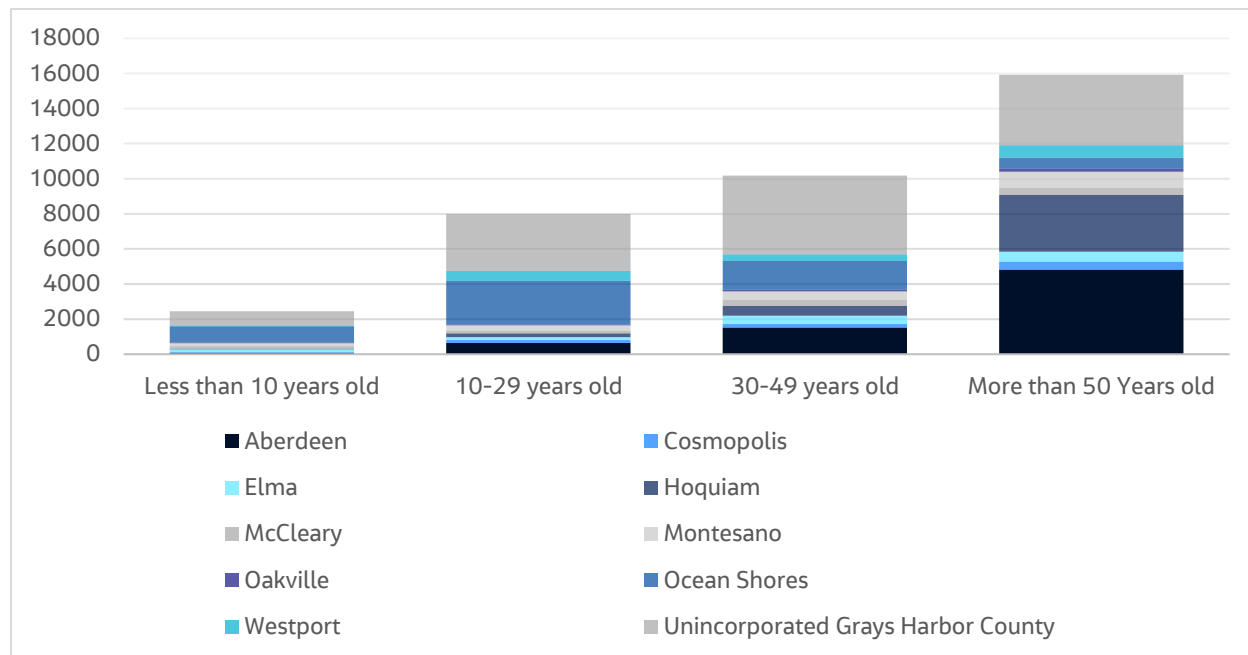
Figure 3.6-1. Housing Structure Types in Incorporated and Unincorporated County, 2023



Source: Census 2023.

The age of the housing is an indicator of housing condition, dwellings more than 50 years old are more likely to need repair or replacement (Figure 3.6-2). In unincorporated county areas, approximately 30% of the housing stock is more than 50 years old. County-wide, more than 40% of homes are older than 50 years, with the cities generally having an older housing stock than unincorporated areas. Figure 3.6-1 shows housing structure types county-wide.

Figure 3.6-2. Age of Existing Housing Stock in Unincorporated and Incorporated County, 2023



Source: Census 2023.

Households, Income, and Housing Prices

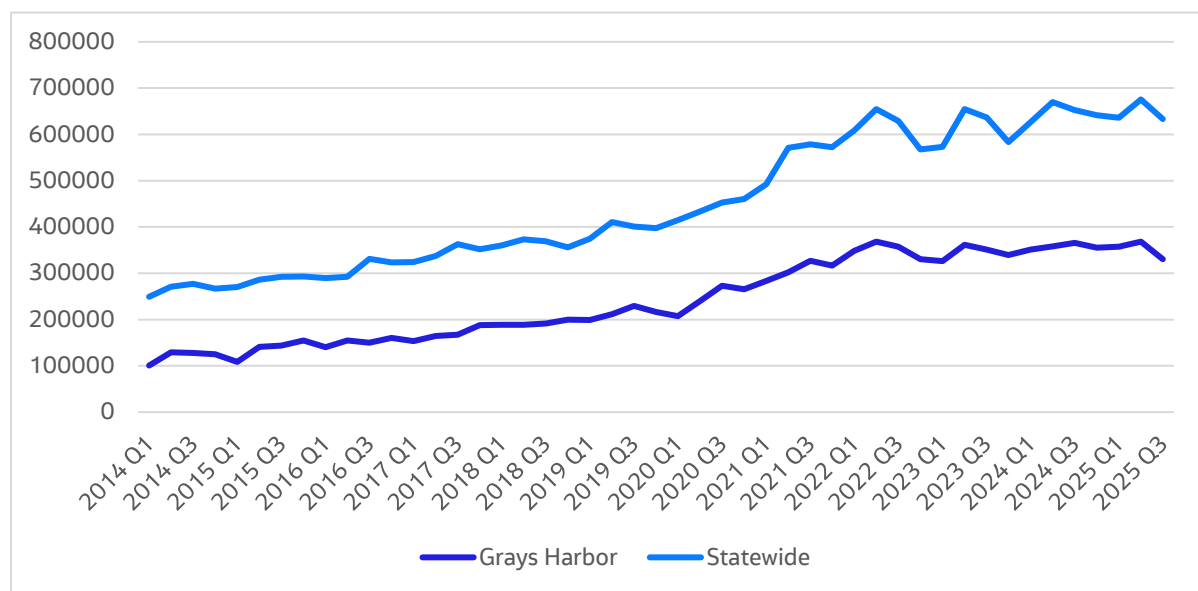
In 2024, there were approximately 30,000 households in the county with an average household size of 2.36 people. This is smaller than the average household size of 2.46 in the state. Household size varies between jurisdictions with smaller average household sizes in cities with more seasonal and second homes.

According to the U.S. Department of Housing and Urban Development (HUD), the household area median family income (HAMFI) for the county was \$89,000 in 2025 (HUD 2025a, 2025b). Between 2021 and 2024, HAMFI increased by more than 40%, rising from \$61,500 to \$89,000. Households earning less than 80% of HAMFI are considered low- and moderate income for housing assistance purposes. Approximately 36% of homeowner households and 70% of renter households in the county are low or moderate income, which is higher than the state average. Statewide 27% of homeowners and 57% of renters have low or moderate income (HUD 2025c).

Housing Prices

The median home price in the third quarter of 2025 was approximately \$330,370 as reported by the Washington Center for Real Estate Research (WCRER 2025). Home prices have more than doubled since 2014 (Figure 3.6-3).

Figure 3.6-3. Median Home Prices: Grays Harbor County and Washington State, 2014 to 2025



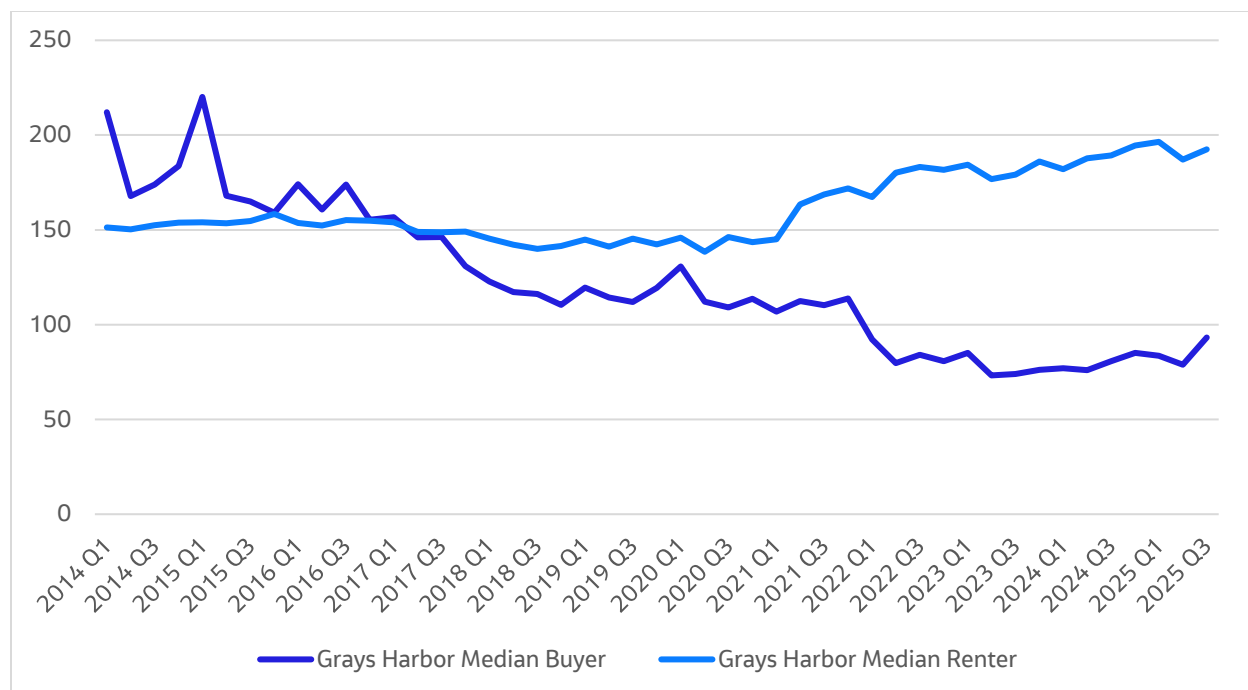
Source: WCRER 2025.

Housing Affordability Index

The Housing Affordability Index (HAI) represents median income as a percentage of the income required to purchase a median-priced dwelling or rent a median-priced apartment.² A value of 100 indicates that a median-priced dwelling or apartment is affordable to a household earning the median income. Values above 100 represent greater affordability, while values below 100 indicate that the median-priced unit is unaffordable to a median income household. In the county, the HAI for homebuyers has been declining and fell below 100 in fourth quarter of 2021, meaning that a median-priced dwelling is not affordable for households earning the median income. By contrast, the HAI for renters with median income is greater than 150, indicating that households earning the median income can generally afford market rate rent (Figure 3.6-4).

² Assuming no more than 25% of income is used for payments (principal and interest). For home buyers, assumes 20% down payment and a 30-year fixed-rate mortgage at the going interest rate.

Figure 3.6-4. County-wide Median Income Buyers/Renters Housing Affordability Index, 2014 to 2025



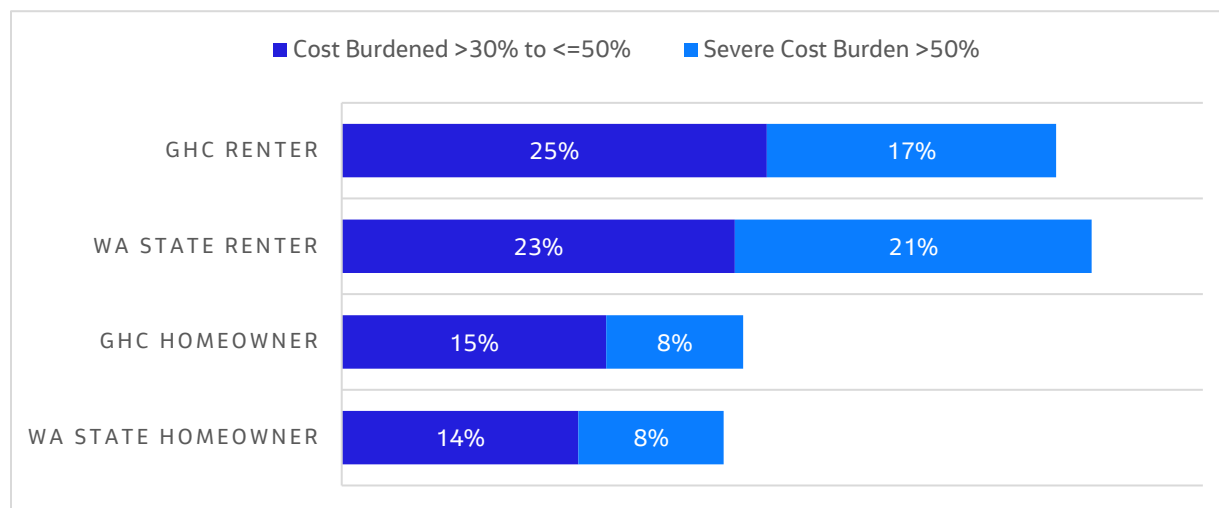
Source: WCRER 2025.

Cost-burdened Households

The number of cost-burdened households is a measure of overall housing affordability because it indicates how many households pay more for housing than they can reasonably afford. County households are similarly cost-burdened compared with Washington state as a whole (Figure 3.6-5). Approximately 8,440 households (29% of total households) in the county are cost-burdened, meaning they spend more than 30% of their income on housing (HUD 2025a).

Renters experience cost burden at higher rates than homeowners. Approximately 41% of renter households are cost-burdened, compared with 23% of homeowner's households, indicating that renters in the county are more likely to face housing affordability challenges.

Figure 3.6-5. Cost-burdened Households County-wide and Washington State, 2017-2021



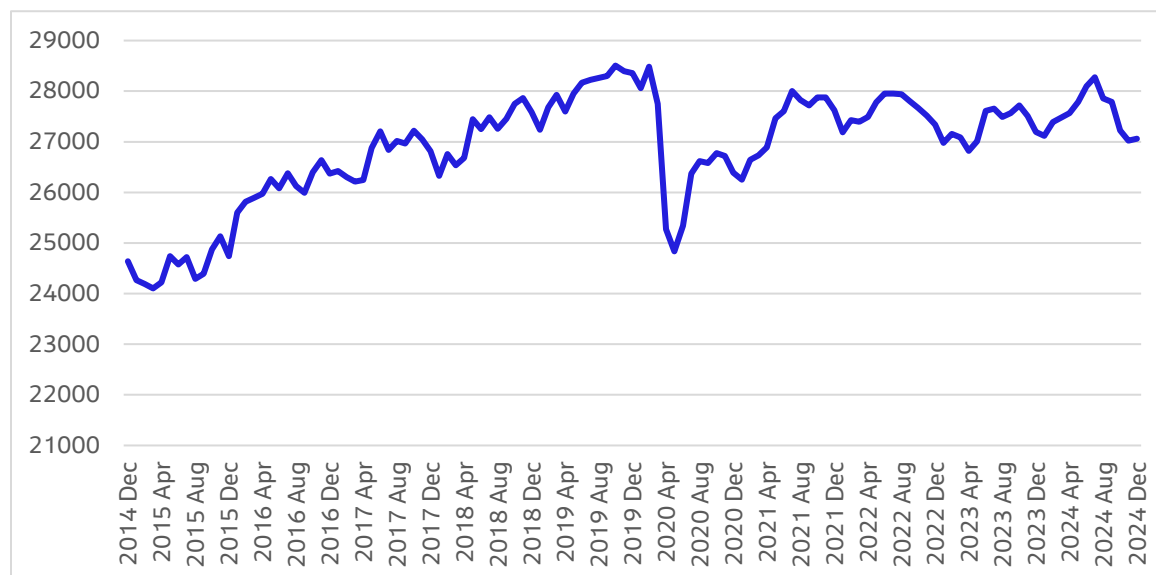
Source: HUD 2025c.

Employment Characteristics and Trends

As of December 2024, approximately 27,100 people in the county were employed out of a total labor force of approximately 29,000, resulting in an unemployment rate of 6.7% (U.S. Bureau of Labor Statistics n.d.). The workforce represented approximately 35% of the total population in 2024. Between 2014 and 2020, employment increased by approximately 16%, rising from 24,000 to just over 28,000 jobs (Figure 3.6-6). Employment declined in 2020 as a result of the COVID-19 public health emergency, later recovered, and has since remained relatively stable between 27,000 and 28,000 jobs.

Most workers, approximately 83%, were employed within the county in 2025, and of these, about 12% worked from home (Census 2024).

Figure 3.6-6. Employment Trends County-wide, 2014 to 2024



Source: U.S. Bureau of Labor Statistics n.d.

Employment Categories

In 2025, the U.S. Bureau of Labor Statistics reported 1,720 business establishments in the county employing nearly 17,000 people. Employment levels tend to be higher in summer than in winter due to the summer tourism sector. Employment and businesses activity are fairly evenly distributed among industry sectors. The top three sectors are trade, transportation, and utilities (20%); leisure and hospitality (15%); and construction (13%) (U.S. Bureau of Labor Statistics 2022). Business and employment by industry sector are shown in Table 3.6-6.

Table 3.6-6. Businesses and Employment: Grays Harbor County, Second Quarter 2025

Industry Sector	Businesses		Employment	
	Sector Total	Percent Total	Total Jobs	Percent Total
Natural resources and mining	104	6%	670	4%
Construction	222	13%	1,447	9%
Manufacturing	96	6%	2,436	14%
Trade, transportation, and utilities	338	20%	3,504	21%
Information	31	2%	94	1%
Financial activities	146	8%	756	4%
Professional and business services	209	12%	1,193	7%
Education and health services	188	11%	3,303	20%
Leisure and hospitality	261	15%	2,812	17%
Other services	125	7%	639	4%
Total, all industries	1,720	100%	16,854	100%

Source: U.S. Bureau of Labor Statistics n.d.

3.6.2 Potentially Significant Impacts

Methods of Analysis

This analysis evaluates the effects of different population growth rates under each alternative. The following measures and assumptions were used to estimate and compare population, housing, and employment outcomes.

Population Allocation and Comparison

Population growth expected under each alternative is distributed to jurisdictions using a proportionate share method, then modified where cities provided planned population growth data. Population effects are evaluated relative to past growth rates to understand magnitude and context.

- For cities, the 2037 population is the value in each city's comprehensive plan, except Aberdeen, which is assumed to maintain a proportionate share of the county's total population.
- The unincorporated county is assumed to absorb the remainder of the forecast population not accommodated in the cities.

Households and Housing Need

Households for each alternative are estimated by multiplying forecast population by the average household size for each jurisdiction to obtain forecast households in 2037. Housing impacts are evaluated by testing whether forecast housing supply is sufficient for forecast households.

- In the unincorporated area, housing need is calculated as households × 123%, reflecting an 18% existing vacancy plus a minimum 5% healthy vacancy (total 23%), so that units are available for rent or sale.
- Construction of new dwelling units is calculated for the unincorporated area only, and is assumed to be 124 units per year or 1,240 units through 2037.

Workforce Estimate and Adequacy

Employment in 2037 is estimated from assumed square footage of new development, using the following employment density factors:

- Retail: 400 square feet per employee
- Industrial: 1,500 square feet per employee

Employment is calculated for the unincorporated area only.

Workforce for each alternative is estimated by multiplying forecast population by 35%, which is the percent of total population in the workforce as of 2024. Of the resulting workforce, 83% are assumed to work within the county. Employment impacts are evaluated by testing whether the forecast workforce will be sufficient to fill the number of forecast jobs in the unincorporated area.

Impacts Common to All Alternatives

Population

County-wide population will increase in all jurisdictions under all alternatives. Direct population impacts on cities will be as contemplated in each city's comprehensive plan and are the same under each alternative, except for Aberdeen (Table 3.6-7).

Table 3.6-7. Population by Alternative in Unincorporated and Incorporated County, 2024 and 2037

Jurisdiction	2024 Population	Projected 2037 Population by Alternative		
		No Action	Moderate Growth	Growth
Unincorporated County	29,420	29,927	32,942	35,957

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Jurisdiction	2024 Population	Projected 2037 Population by Alternative		
		No Action	Moderate Growth	Growth
Aberdeen	17,100	17,955	18,810	19,665
Cosmopolis	1,680	1,741	1,741	1,741
Elma	3,505	3,743	3,743	3,743
Hoquiam	8,800	9,450	9,450	9,450
McCleary	2,085	2,340	2,340	2,340
Montesano	4,135	4,528	4,528	4,528
Oakville	720	756	756	756
Ocean Shores	7,630	7,630	7,630	7,630
Westport	2,325	3,200	3,200	3,200
Total population	77,400	81,270	85,140	89,010

Source: OFM 2025c.

Under all alternatives, the following cities would grow slower than they did in the past decade: Elma, McCleary, Oakville, and Ocean Shores. The following cities would grow faster than they did in the past decade: Aberdeen, Cosmopolis, Hoquiam, Montesano, and Westport (Table 3.6-8).

Table 3.6-8. Growth Rates by Alternative, Unincorporated and Incorporated County, 2015 to 2037

Jurisdiction	Average Annual Growth 2015-2024	Projected Annual Population Growth 2024-2037		
		Alternative 1: No Action	Alternative 2: Moderate Growth	Alternative 3: Growth
Unincorporated County	0.3%	0.1%	0.8%	1.7%
Aberdeen	0.2%	0.4%	0.7%	1.2%
Cosmopolis	0.2%	0.3%	0.3%	0.3%
Elma	1.2%	0.5%	0.5%	0.5%
Hoquiam	0.3%	0.6%	0.5%	0.6%
McCleary	2.5%	0.9%	0.8%	0.9%
Montesano	0.1%	0.7%	0.7%	0.7%
Oakville	0.5%	0.4%	0.4%	0.4%
Ocean Shores	3.0%	0.0%	0.0%	0.0%
Westport	1.0%	2.9%	2.8%	2.9%
Total County	0.6%	0.4%	0.7%	1.2%

Source: OFM 2025c.

Housing

The number of households and need for housing units would increase in all jurisdictions. Construction of new housing units in the unincorporated area would continue at the 2015-2027 rate of 124 units per year, for a total of 1,612 units between 2024 and 2027 (Table 3.6-9). Housing construction rates and supply within cities is unknown and thus impacts to housing affordability in cities is also unknown.

Table 3.6-9. Household Change, 2025 to 2027

Jurisdiction	2024 Existing Housing Units	2020 Average Household Size	No Action Alternative		Moderate Growth Alternative		High Growth Alternative	
			House-holds	Housing Demand	House-holds	Housing Demand	House-holds	Housing Demand
Unincorporated County	12,562	2.39	212	261	1,474	1,813	2,735	3,364
Surplus/Deficit)	-	-	1,400	1,351	138	(201)	(1,123)	(1,752)

Source: OFM 2025a.

Employment

Under all alternatives, approximately 1,800 jobs would be added to the local economy. Jobs are forecast based on the square feet of retail and industrial development assumed under all alternatives. Most jobs (62%) would be retail or service industry jobs and the remainder (38%) would be industrial or manufacturing jobs (Table 3.6-10).

Table 3.6-10. Forecasted Employment Change, 2025 to 2037

Unincorporated Area	Square Feet	Square Feet per Employee	Employees
Retail	450,000	400	1,125
Industrial	1,000,000	1500	665
Total	1,450,000		1,790

Source: Jacobs 2025.

Population and workforce levels in the unincorporated area are expected to increase under all scenarios. Growth ranges from minimal change under the No Action Alternative to substantial increases under the High Growth Alternative. These changes translate into additional local labor force, including increases in the number of potential workers. The resulting surplus or deficit reflects the extent to which local workforce supply may meet future employment needs. Under the No Action and Moderate Growth alternatives, the workforce growth there would be a surplus of jobs available, while there would be a deficit under the High Growth Alternative (Table 3.6-11).

Table 3.6-11. Forecasted Population and Workforce Changes, Unincorporated County, 2025 to 2037

Unincorporated Area	No Action	Moderate Growth	Growth
Population Change	505	3,522	6,537
Workforce Change (35%)	175	1,233	2,288
Working in County (85%)	150	1,048	1,945
Surplus/Deficit)	1,650	752	(145)

Source: OFM 2025b

Impacts by Alternative

Alternative 1: No Action

Under the No Action Alternative, the county would experience slower population growth, sufficient housing supply that may improve affordability in unincorporated areas, and job growth that outpaces local workforce increases, leading to a tighter labor market (Table 3.6-12).

Table 3.6-12. Potential Impacts Under the No Action Alternative

Impact	Description
Population	The county as a whole and the unincorporated county would grow at a slower rate than in the past. This is due to the assumption that cities would grow to meet the population forecast in their plans under all alternatives and the remainder of the population growth would occur in unincorporated areas.
Housing	The number of housing units built would be sufficient to meet the demand for housing units. Housing may become more affordable in the unincorporated area than under existing conditions because the forecast housing supply is substantially higher than the demand, which could result in lower housing prices.
Employment	Job growth in the unincorporated county would outpace the growth of the unincorporated county workforce. This may result in lower unemployment rates, an increased rate of people working outside the county transferring to jobs within the county, and/or influx of workers from outside of the county.

Source: OFM 2025

Alternative 2: Moderate Growth

Under the Moderate Growth Alternative, the county and unincorporated areas would experience higher population growth than in the past, a housing supply deficit that increases affordability pressures, and employment impacts similar to the No Action Alternative but less pronounced due to a smaller gap between workforce and job growth (Table 3.6-13).

Table 3.6-13. Potential Impacts Under the Moderate Growth Alternative

Impact	Description
Population	The county as a whole would grow at a slightly higher rate (0.7%) than in the past (0.6%). The unincorporated county would grow at a significantly higher rate (0.8%) than in the past (0.3%) and would grow faster than the county as a whole. The unincorporated county would grow faster than the cities except for McCleary and Westport.
Housing	The number of housing units built would not be sufficient to meet the demand for housing units. There would be a housing supply deficit of approximately 200 housing units. The lack of supply to meet demand would result in lower vacancy rates and higher housing prices. Higher housing prices are likely to increase the percentage of cost-burdened households and cause the HAI to continue to fall unless incomes increase to keep pace with housing prices.
Employment	The impacts will be similar to the No Action Alternative but smaller because the imbalance between the workforce and the employment growth is smaller.

Alternative 3: High Growth

Under the High Growth Alternative, rapid population increases far above historical levels would combine with a substantial housing unit deficit that intensifies affordability pressures, while a near balance between workforce and employment could still lead to slightly higher unemployment or more workers commuting outside the county for work (Table 3.6-14).

Table 3.6-14. Potential Impacts Under the High Growth Alternative

Impact	Description
Population	The county as a whole will grow at 1.2% per year, which is twice as fast as it has grown in the past. The unincorporated county will grow at a rate of 1.7%, which is more than five times faster than in the past, and faster than the county as a whole and all cities except for Westport.
Housing	The number of housing units built would not be sufficient to meet the demand for housing units. The housing supply deficit would be substantial at 1,752 units. The lack of supply to meet demand would result in lower vacancy rates and higher housing prices. Higher housing prices are likely to increase the percentage of cost-burdened households and cause the HAI to continue to fall. It is unlikely that incomes could keep up with housing prices with a deficit of this magnitude.
Employment	The workforce and employment will be roughly balanced, although the workforce will grow faster than the available employment. This may result in a slightly higher unemployment rate or a greater percentage of the workforce finding work outside of the county.

3.6.3 Avoidance, Minimization, and Mitigation

Incorporated Plan Features

The land use designations in the 2027 Comprehensive Land Use Plan include a range of densities, mix of uses, and include sufficient land designated for development of housing under all alternatives.

Applicable Regulations and Commitments

The County will maintain the adopted comprehensive plan consistent with the requirements for partial planning jurisdictions under the GMA and RCW 36.70.

Other Potential Mitigation Measures

The following measures will be considered to increase the development capacity within the Mixed-Use and Urban Services designations:

- Zoning incentives such as increase in density, height, or lot coverage
- Zoning incentives for multi-family uses
- Increase in the capacity of water, sewer, and road infrastructure

The following housing programs or policies will be considered to address affordability:

- Zoning incentives or density bonuses for affordable housing
- Policies or programs to support transitional, emergency, and supportive housing
- Cooperative programs with cities to increase affordable housing

3.6.4 Significant Unavoidable Adverse Impacts

Population, employment, and housing will increase under any of the alternatives with Alternative 1 increasing the least and Alternative 3 increasing the most. Increases in population and employment would drive increased demand for a wider range of housing types and quantities, resulting in increased housing cost and reduced affordability if demand exceeds supply.

3.7 Cultural Resources

This section summarizes the affected environment, potentially significant impacts, and measures to avoid, minimize, or mitigate such impacts. The study area for the evaluation of cultural resources focuses on unincorporated areas of the county.

3.7.1 Affected Environment

This section describes the cultural setting of the county, providing baseline information on the region's archaeological context, tribal history, ethnographic background, and historic-period settlement patterns. These existing conditions establish the framework for understanding cultural resources that may be present within the plan area and inform the analysis of potential impacts under the alternatives.

Cultural Setting

Grays Harbor County is located within the Olympic Peninsula physiographic province, characterized by a core of mountains surrounded by low foothills and level lowlands (Franklin and Dyrness 1973). The region was glaciated during the Last Glacial Maximum, with lower elevation areas emerging around 17,000 years ago (Wegmann et al. 2012). Post-glacial sea levels in Puget Sound fluctuated due to the effects of eustasy, isostasy, and tectonism (Booth et al. 2005).

A study conducted for the northern Olympic Peninsula (about 48 miles north of the county) found that about 13,300 years ago, sea level was more than 40 meters above modern levels. This was attributed to crustal depression following ice retreat, followed by a drop to roughly 60 meters below modern sea level around 10,700 years ago as the crust rebounded (Wegmann et al. 2012). These changes produced the steep-walled valleys and deeply incised drainages visible in the modern landscape.

Throughout the Holocene, sea levels steadily rose (Wegmann et al. 2012). Much of the county would have likely been available for human settlement, through the early sites located near the prior shoreline may have been submerged, with very early sites located at higher elevations relative to the modern shoreline. Before Euro-American contact, coastal and riverine waters supported salmon and other fish, while uplands provided a variety of edible plants and game species.

The earliest recorded archaeological sites in Western Washington date to the late Pleistocene (Ames and Maschner 1999). Such sites are typically sparse stone tool assemblages found in upland areas. The Manis Mastodon site, one of the earliest dated sites in Washington, is approximately 42 miles northeast of the northern county boundary. The site, which includes a bone point embedded in a mastodon rib, has been radiocarbon-dated to about 12,000 before present (Gustafson and Manis 1984). A handful of other sites in the Puget Sound region also date to the late Pleistocene/early Holocene, including the Bear Creek site near Redmond, also found in an upland context (in this case, along a tributary to the Sammamish River [Kopperl 2016]).

By the mid-Holocene, populations in the region began to organize in complex ways to exploit a wide range of terrestrial and littoral resources including salmon and shellfish, land mammals, and plant resources such as berries, roots, and bulbs. Cultures around Puget Sound and northward show “an unequivocal adaptation to coastal resources,” though classic Northwest coast developments such as sizable longhouses and large-scale storage are still absent (Matson and Coupland 1995). Over time, populations grew and began to reside in large semisedentary cedar plank house villages located at river mouths and confluences and on protected shorelines. The artifact tool kits became increasingly complex and specialized, allowing for large takes of resources, which were processed and stored for year-long consumption (Ames and Maschner 1999). These late-Holocene cultures correlate with ethnographically described Southern Coast Salish peoples.

The project area lies within the traditional territory of the Southwestern Coast Salish peoples that speak languages in two families: Quinault, spoken in the northwestern part of the county, and Chehalis (Upper and Lower), spoken in the remainder of the county (Hajda 1990; Ruby and Brown 1986; Olson 1936). Quinault-speaking groups include the Quinault, Queets, and Copalis peoples; Upper Chehalis speakers include the Upper Chehalis and Satsop peoples; and Lower Chehalis speakers include the Humptulips, Wynoochee, and Chehalis peoples.

Historically, Salish villages were occupied seasonally, largely in winter. Winter settlements made seasonal journeys to camps near resource gathering areas. Subsistence systems relied on fish caught using weirs and traps, harvested along with shellfish and sea mammals (Hajda 1990; Smith 1940). These food sources were supplemented with various upland game, berries, roots, nuts, and bulbs including camas (Hajda 1990). The earliest documented contacts between Southwestern Coast Salish communities and Euro-Americans were in the 1770s at the mouth of the Quinault River and Grays Harbor. Contact increased with regular trade, which was occurring by the time the Lewis and Clark expedition met Lower Chehalis-speaking people on the Lower Columbia River in 1805 to 1806 (Hayes 1999; Hajda 1990).

Historical Setting

Grays Harbor was mapped and renamed in 1792 by the Vancouver expedition, after one of the expedition’s captains (Hayes 1999). As Euro-American presence increased in the 1800s with expanding timber interests, tribal communities suffered epidemics of smallpox, cholera, and malaria (Hajda 1990; Wilma 2006). In 1855, leaders of the Quinault, Hoh, Queets, and Quileute signed the Quinault River Treaty, assigning the Quinault people to a reservation. Chehalis leaders did not sign a treaty, but interacted with the Quinault Agency and later received allotments from the United States government, many of which were quickly sold to timber companies (Wilma 2006; Ruby and Brown 1986). The Chehalis Reservation was established by Executive Order in 1864. Traditional cultural practices have persisted, and tribal descendants are members of several federally recognized tribes, including the Quinault Tribe and Chehalis Confederated Tribes (Ruby and Brown 1986).

Euro-American settlement developed slowly, as many early claimants struggled to establish lasting footholds. In 1854, the territorial legislature created Chehalis County from Lewis County; it was later renamed Grays Harbor County in 1915 (Wilma 2006). Through the mid-19th century, scattered non-Native activity, such as small logging, river transport, and coastal trade coexisted

with Indigenous land- and water-use systems, as large-scale industrial operations had not yet taken hold (Olson 2025). By the 1870s–1880s, advances in harvesting and transport enabled access to denser timber stands, drawing immigrant labor and setting the stage for the county's rise as a timber center, even as early camps remained dangerous and conditions harsh (Wingard 2022; Olson 2025).

Settlement concentrated around the Grays Harbor's tide flats in the late 1800s as mills multiplied in Cosmopolis, Hoquiam, and Aberdeen, and political power increasingly aligned with timber interests (Wilma 2006). The emerging workforce was multiethnic, notably including Finnish communities that influenced labor culture. Logging firms scaled up rapidly, with prominent operators such as Polson, Pope & Talbot, and Weyerhaeuser among hundreds of outfits active from the 1880s onward (Goings 2008, 2016).

Railroads accelerated this growth. The Puget Sound and Grays Harbor line, built between the towns of Shelton and Montesano, and completed in 1889 by the owners of the Port Blakely Mill Company, linked mills to national markets, enabling high-volume exports, opening deeper access into previously unreachable forests, which in turn increased labor demand. Within 2 years, Northern Pacific expanded to the harbor's south shore and extended into Aberdeen by 1895, Hoquiam by 1898, and Moclips by 1905 (Davidson 2001; Olson 2025).

By the early 20th century, the county had become one of the most significant timber-producing regions and a center of militant labor activity. Dangerous working conditions, long hours, and low pay contributed to widespread worker dissatisfaction; many loggers and mill workers were immigrants from Finland, Eastern Europe, and elsewhere. The Industrial Workers of the World became a major force in the county's labor movement. By the 1910s and 1920s, the region experienced some of the most intense labor conflicts in the Pacific Northwest, with mass strikes and community-wide mobilization pushing employers toward safer conditions and higher wages (Goings 2008; Wingard 2022). These labor struggles also influenced local civic life, as union halls doubled as cultural centers and as alliances formed across ethnic and occupational lines (Goings 2008).

After World War II, strong timber demand continued, but mechanization, shifting forest policies, and declining old-growth stands gradually altered the economic landscape. Even as postwar mills maintained high output, environmental concerns and new federal and state restrictions signaled a transition from reliance on old-growth harvesting to more regulated forestry (Olson 2025).

By the 1970s, the industry became increasingly volatile, as long-rooted logging families faced regulatory pressure and ecological limits. By the 1980s, reduced access to old-growth timber, habitat-protection conflicts (e.g., northern spotted owl), and mill closures made the downturn unmistakable. Communities balanced pride in their timber heritage with anxiety over job loss, yet the period also demonstrated the harbor's resilience as residents adapted to shifting economic and environmental realities (Duncan 1990).

As the timber economy began to contract in the mid- to late twentieth century, communities along the harbor increasingly turned toward recreation and coastal tourism as supplemental sources of income. These new economic activities did not replace the region's deep connection to logging but instead layered onto a landscape, identity, and civic culture long shaped by more than a century of timber production (Olson 2025; Duncan 1990).

Regulatory Setting

Federal and state laws govern the identification and treatment of cultural resources, which include archaeological sites, historic buildings and structures, and areas of traditional cultural importance. The following summarizes laws and orders relevant to cultural resources in the county.

Federal

Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800) apply to projects that use federal funding, require a federal permit or approval, or take place on federal or American Indian lands. Section 106 requires federal agencies to consider the effects of their undertakings on historic properties, in consultation with Native American Tribes and the State Historic Preservation Office. Eligible historic properties are sites, structures, objects, and districts eligible for listing in the National Register of Historic Places (NRHP); some historic properties can also be designated Traditional Cultural Properties or Cultural Landscapes.

Section 4(f) of the Department of Transportation Act applies to projects funded by U.S. Department of Transportation agencies. It prohibits the use of certain properties, including NRHP-eligible historic properties, unless there is no feasible and prudent alternative.

Other federal statutes, such as the Archaeological Resources Protection Act and Native American Graves Protection and Repatriation Act, apply primarily to federal or tribal lands. Because the planning areas does not include federal or tribal lands, these laws are not further discussed.

State

The Governor's Executive Order 21-02 applies to state-funded construction or acquisition projects that will not undergo Section 106 review. It directs state agencies to take all reasonable action to avoid, minimize, or mitigate adverse effects to archaeological and historic archaeological sites, historic buildings/structures, traditional cultural places, sacred sites, or other cultural resources. It also requires consultation with Native American Tribes and the Department of Archaeology and Historic Preservation.

RCW 27.53 (Archaeological Sites and Records) prohibits the unpermitted removal of archaeological materials and establishes a permitting process.

RCW 27.44 (Indian Graves and Records) and RCW 68.60 (Abandoned and Historic Cemeteries and Historic Graves), describe how human remains must be treated.

County

The GHCC does not include regulations addressing historic preservation or a formal cultural resource review process.

Tribal Coordination and Sovereignty

The Quinault Indian Reservation is located within Grays Harbor County, and the Confederated Tribes of the Chehalis Reservation is located partially within the county (extending into Thurston

County). Reservation lands and other Native American lands are not subject to County land use plans or regulations. Tribes are sovereign nations, and government-to-government consultation is required under the federal and state laws and policies listed earlier in this section.

Existing Conditions

Register-Listed Resources

There are 36 resources in the county that are listed in the NRHP, the Washington Heritage Register, or the Washington Heritage Barn Register. Of these listed resources, 28 are outside the study area because they are federal, Tribal, or incorporated lands. The remaining eight resources are all listed only on the Washington Heritage Barn Register (Table 3.7-1). All of the eight listed resources in the study area are buildings or structures; none are archaeological sites.

Table 3.7-1. Register-Listed Cultural Resources in Unincorporated County

Cultural Resource Name	Location
Elias Glengarry Farm Barn	484 Old Monte Brady Road, Montesano
Parker Askew and Sons Barn	32 Matzen Road, Montesano
Dianovich Dairy Farm Barn	156 Artic Road, Cosmopolis
Fivestar Farm Barn	1555 South Bank Road, Oakville
Beerbower Farms Barn	130 Porter Creek Road, Elma
John Babich Barn	42 Bush Creek Road, Elma
Valenhaven Farm Barn	144 Hurd Road, Elma
Zaugg Homestead Barn	11 Old Sand Creek Road, McCleary

Note: All resources are listed only in the *Washington Heritage Barn Register* (DAHP n.d.).

Historic Buildings and Structures

In addition to the 36 listed properties, there are approximately 3,784 buildings and structures older than 45 years in the county as a whole. Of these, 119 have been determined not eligible for preservation register, leaving 3,701 eligible or potentially eligible buildings and structures (Table 3.7-2). Many are likely outside the planning area, because older buildings and structures tend to be concentrated in incorporated communities.

Table 3.7-2. Register-Eligible and Potentially Eligible Buildings/Structures in Grays Harbor County

NRHP Register Status	Number of Buildings and Structures
Listed	36
Determined Eligible but Not Listed	83

NRHP Register Status	Number of Buildings and Structures
Not Evaluated	3,582
Total	3,701

Sources NRHP (National Park Service 2025), Washington Heritage Register (DAHP n.d.-a), and Washington Heritage Barn Register (DAHP n.d.-b).

Archaeological Sites

According to the Department of Archaeology and Historic Preservation's Washington Information System for Architectural and Archaeological Records Data (WISAARD), there are 268 resources recorded as archaeological sites in the county. However, eight of those are buildings or structures on U.S. National Forest Service land that were recorded as archaeological sites under agency policies. An additional 67 resources have been determined not register-eligible. Excluding the structures and non-eligible sites leaves 193 eligible or potentially eligible recorded archaeological resources. Very little of the county has been archaeologically surveyed.

Approximately 70% of the recorded archaeological sites contain only historic-era components, mostly related to logging, transportation, and military infrastructure. The remaining approximately 30% are precontact sites, including villages and other habitation sites.

Of the 193 eligible or potentially eligible recorded archaeological resources, none are register-listed. Six have been determined register-eligible, all of which are culturally modified trees. The remaining 187 have not been evaluated for register eligibility (Table 3.7-3).

Table 3.7-3. Register-Eligible and Potentially Eligible Archaeological Sites in Grays Harbor County

Register Status ^[a]	Number
Listed	0
Determined Eligible but Not Listed	6
Not Evaluated	187
Total	193

^[a] NRHP and Washington Heritage Register.

Traditional Cultural Properties

Traditional Cultural Properties are locations associated with the cultural practices, beliefs, or identity of a living community. WISAARD does not list any tribal associated Traditional Cultural Properties in the county. However, Traditional Cultural Properties are not added to WISAARD unless requested by the community that engages in the traditional practice, and it is likely that many places of importance to tribal communities are present in the county.

3.7.2 Potentially Significant Impacts

Cultural resources are non-renewable, and any impact on resources eligible for preservation registers would be significant. The potential for impacts on cultural resources is proportional to

the intensity of development. Development can potentially impact cultural resources directly through ground disturbance that impacts archaeological sites, demolition of historic buildings and structures, changes that diminish historic landscape and setting, or new construction that restricts access to areas of traditional cultural practice. Indirect effects can also occur, such as changes in circulation that make archaeological sites more vulnerable to vandalism, or that cause historic structures to be at greater risk of abandonment and eventual demolition. Increased population can also put pressure on sensitive traditional resources.

Methods of Analysis

Impacts were assessed by conducting a desktop review of the environmental, cultural, and historical setting, as well as recorded cultural resources. Potential impacts were qualitatively compared to the alternatives based on the order of magnitude of potentially significant impacts.

Impacts Common to All Alternatives

Proposed changes in land use classifications could influence future development, and those potential effects would apply to all alternatives. None of the alternatives would directly affect cultural resources.

Alternative 1: No Action

This alternative would result in the least amount of growth. Because impacts on cultural resources generally increase with the level of development, this option has the lowest potential for adverse effects.

Alternative 2: Moderate Growth

This alternative anticipates more development than the No Action Alternative. As a result, the potential for impacts on cultural resources would be moderately higher.

Alternative 3: High Growth

This alternative expects the greatest amount of development. Accordingly, it would pose the highest potential for impacts on cultural resources.

3.7.3 Avoidance, Minimization, and Mitigation

Incorporated Plan Features

There are no incorporated plan features to avoid impacts to cultural resources other than compliance with applicable regulations.

Applicable Regulations and Commitments

Development projects will be required to comply with applicable laws and regulations regarding impacts on cultural resources. Section 106, National Environmental Policy Act, Executive Order 21-02, SEPA, and RCW 27.53, among others, require impacts on cultural resources be identified and mitigated.

Other Potential Mitigation Measures

Mitigation is developed at the project level, with the relevant laws generally requiring consultation with Native American Tribes, the Department of Archaeology and Historic Preservation, and other interested parties. Additional mitigation options include adoption of policies and regulations that establish local processes and standards for cultural resource review, coordination, and protection.

3.7.4 Significant and Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on cultural resources are anticipated. The primary contributor to effects associated with future growth would be development of vacant lands.

The regulations, incorporated plan features, and other potential mitigation measures are adequate to mitigate any adverse impacts anticipated to occur.

3.8 Transportation

This section establishes the baseline transportation setting for the unincorporated county area. The system that connects rural communities to regional destinations and statewide networks is described. The study area for transportation is defined by the County's jurisdictional boundaries, with more intensive review focused on the potential growth areas in unincorporated areas.

3.8.1 Affected Environment

The governing context described in this section outlines the state, regional, and local frameworks that guide how facilities are planned, operated, and maintained. Also described are the existing roadway network and functional classifications, including travel patterns and multimodal access; traffic volumes; localized congestion; freight, port, and rail interfaces; and system safety and reliability.

Regulatory Setting

Transportation in the county is governed by a combination of state, regional, and local regulations, plans, and policies. These frameworks, ranging from Washington State Department of Transportation's (WSDOT) statewide planning documents to County codes and transit development plans, shape how transportation facilities are planned, operated, and improved. The following subsections summarize the major regulations and planning documents that influence transportation and infrastructure conditions in the county.

Because the County is partially planning under the GMA (RCW 36.70A), the transportation concurrency requirements in the GMA for transportation concurrency do not apply. This means the County is not required to adopt minimum levels-of-service (LOS) for transportation facilities or ensure that facilities are adequate to serve new development. Partially planning jurisdictions are not authorized to levy transportation impact fees (RCW 82.02.050).

County Framework

Local guidance includes the existing Grays Harbor County Comprehensive Plan, the GHCC, the Transit Development Plan (GHTA 2025), and Public Works/Road District policies. Together, these documents provide the legal and policy framework for transportation planning, operations, and infrastructure management in the unincorporated areas of the county.

Because the GHCC has not adopted minimum LOS for transportation facilities and does not require transportation impact analysis, development-related transportation impacts are addressed through compliance with SEPA.

The following titles ensure planning consistency with state law, support roadway safety (for example, speed limits, parking restrictions, and traffic control), provide standards for streets and public right-of-way (ROW), and align legal requirements with long-range transportation goals:

- Title 10 – Vehicles and Traffic establishes the Grays Harbor Traffic Code (GHTC), incorporates state traffic statutes (RCW) by reference with a county prefix for local enforcement, and provides the legal basis for citations, penalties, and traffic operations on county roads.

- Title 12 – Streets, Sidewalks, and Public Places sets roadway standards and ROW regulations; governs permitting for construction, access, and utility work in the ROW; and establishes rules for sidewalks, pathways, and public spaces adjacent to county roads.
- Title 16 – Subdivisions require the proponent to construct offsite improvements, including roadway improvements, necessitated by the subdivision.

State Framework

The County coordinates with and adheres to applicable statewide transportation policies and plans. The state transportation plans and policies described as follows establish the regulatory and planning context for highway system management, LOS expectations, and statewide transit coordination:

Washington State Highway System Plan

The Washington State Highway System Plan is the state's 20-year plan for preserving, operating, and enhancing the highway network (WSDOT). Recognizing fiscal constraints, the plan emphasizes financially realistic guidance and prioritizes preservation, maintenance, safety, operational efficiency, and critical programs (for example, fish passage). Public input and technical analysis informed recommendations that generally favor improving safety and efficiency before expansion, with investment strategies aligned to statutory requirements and statewide performance objectives.

Highways of Statewide and Regional Significance

In 1998, the Legislature created Highways of Statewide Significance (HSS) (RCW 47.06.140) to identify facilities that support significant statewide travel and economic linkages and therefore should be planned from a statewide perspective. WSDOT sets LOS standards for HSS. Local jurisdictions are expected to evaluate how local land use plans affect these facilities.

Highways of Regional Significance (HRS) are state routes that do not carry the HSS designation; HRS facilities may be managed according to the locally adopted operational standards of the jurisdictions in which they are located. The *Highway Capacity Manual* and American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets* list the following LOS definitions (National Academies of Sciences, Engineering, and Medicine 2022; AASHTO 2018):

- A = Free flow
- B = Reasonably free flow
- C = Stable flow
- D = Approaching unstable flow
- E = Unstable flow
- E Mitigated = Congestion should be mitigated when p.m. peak hour LOS falls below LOS "E"
- F = Forced or breakdown flow

Level-of-Service Standards

Regional transportation planning organizations (RTPOs) and WSDOT jointly develop and RTPOs establish LOS standards for regionally significant state highways and ferry routes (non-HSS)

based on RCW 47.80.030(1)(c). LOS measures are assigned to evaluate how well state highways and ferry routes operate and to set performance standards that guide planning, development review, and system management. LOS grades (A–F) summarize operating conditions such as speed, delay, or throughput and help planners assess roadway effectiveness, determine when mitigation is needed, and balance statewide mobility with local community needs as required under state law.

WSDOT defines its LOS as follows (WSDOT 2024):

- LOS “A” – This is a very high maintenance service level in which the roadway and associated features are in excellent condition. All systems are operational and users experience no delays.
- LOS “B” – This is a high maintenance service level in which the roadway and associated features are in good condition. All systems are operational. Users may experience occasional delays.
- LOS “C” – This is a medium maintenance service level in which the roadway and associated features are in fair condition. Systems may occasionally be inoperable and not available to users. Users may experience short-term delays during repairs but the delays are not be excessive.
- LOS “D” – This is a low maintenance service level in which the roadway and associated features are in generally poor condition. System failures occur because it is impossible to react in a timely manner to all problems. Occasional delays may be significant.
- LOS “F” – This is a very low maintenance service level in which the roadway and associated features are in poor and failing condition. A backlog of systems failures would occur because it is impossible to react promptly to all problems. Significant delays occur regularly.

Functional Classification

WSDOT, in cooperation with responsible local officials and consistent with Federal Highway Administration requirements, develops and updates statewide functional classifications to define how each highway serves traffic flow within the broader network, as directed by state law (RCW 47.05.021). WSDOT classifies highways to define the function each route serves within the broader transportation network, ensuring travel is channeled logically and efficiently for planning and system management. Functional classification helps identify how different roads contribute to the flow of regional and statewide travel and supports long-range transportation planning and federal reporting requirements.

The following lists the main functional classification types used by WSDOT and defined through the federal functional classification system:

- Principal Arterials – These routes serve major statewide and regional travel, carrying long-distance trips and high traffic volumes.
- Minor Arterials – These roads provide intermediate connections, linking communities and supporting shorter-distance mobility compared to principal arterials.
- Collectors (Major and Minor) – Collector roads gather traffic from local streets and channel it to the arterial system, balancing mobility with access.
- Local Roads – These streets primarily provide direct access to adjacent land rather than through-travel, serving short, local trips.

WSDOT Transit Development Plan

The WSDOT Transit Development Plan (TDP) Guidebook (2023) provides a long-range framework to guide statewide public transportation programs, investments, and coordination. It supports integrated, sustainable services aligned with statewide objectives for mobility, equity, safety, climate, and multimodal connectivity. WSDOT's responsibilities under the TDP include administering state and federal transit programs, aligning long-range planning and policy, facilitating interagency and regional coordination, providing technical assistance, monitoring system performance and trends, and conducting public and stakeholder engagement. The TDP advances goals around thriving communities, access, adaptive capacity, customer experience, and stewardship of the transportation system; each supported by strategies and near-term actions.

Title VI of the Civil Rights Act and Americans with Disabilities Act Compliance

Title VI of the Civil Rights Act prohibits discrimination based on race, color, or national origin in any program receiving federal financial assistance. The Americans with Disabilities Act (ADA) prohibits discrimination based on disability and requires equal access to programs, services, and facilities. In Washington, these requirements apply to WSDOT, transit agencies, local jurisdictions, and subrecipients, and are integrated into infrastructure design, transit operations, public engagement, and reporting.

Regional Coordination

Regional planning and coordination among WSDOT, transit providers, local jurisdictions, and community partners support consistent assumptions, coordinated service delivery, and performance-based decision-making. These relationships also help integrate multimodal and equity considerations across planning horizons and capital programs.

Regional Transportation Planning Organization and Grays Harbor Council of Governments

The SWRTPO is the state-designated RTPO for the county and other counties and cities in southwest Washington. The RTPO duties include preparing a regional transportation plan, reviewing and certifying local comprehensive plans for consistency with the regional transportation plan and developing a 6-year regional transportation improvement program (TIP).

Coordination with the RTPO occurs through GHCOG. GHCOG works in partnership with the Cowlitz-Wahkiakum Council of Governments to create the Unified Planning Work Program (UPWP; GHCOG 2026), which outlines the transportation planning efforts for the five counties represented by the SWRTPO including the County. In addition to the UPWP, the SWRTPO and GHCOG implement the *Bay-2-Bay Corridor Management Plan* (SWRTPO and GHCOG 2026), *Hidden Coast Scenic Byway Corridor Management Plan* (GHCOG et al. 2011), and *SWRTPO Regional Trails Plan* (SWRTPO 2025). The 2026 UPWP includes the following funded and unfunded projects in the county:

- SWRTPO planning assistance in the county (funded)
- Coordinated rail planning effort for Lewis, Grays Harbor, and Cowlitz counties (unfunded)

- Local road safety plan development for six cities in the county (unfunded)
- Railroad quiet zone development planning in Elma, Montesano, and Aberdeen (unfunded)
- Regional trails planning to include segment mapping and engineering/construction estimates in the county (unfunded)

Grays Harbor Transit Development Plan

The Grays Harbor Transportation Authority (GHTA), also known as Grays Harbor Transit (GHT), is a county transportation authority authorized under RCW Chapter 36.57. The Board of Directors adopted the 2021 TDP on August 10, 2021. GHT began service in June 1975 and holds monthly public meetings in Hoquiam.

For 2021 to 2026, GHT focuses on improving convenience, reliability, and customer service; enhancing operational safety and security; better integrating transit to support the economy and environmental stewardship (including consideration of alternative-fuel technologies); maintaining a state of good repair while matching service to demand and priority populations; and meeting ADA requirements while containing paratransit costs. Performance measures address on-time performance, amenities and connectivity, safety, alternative-fuel and productivity metrics, state of good repair, and expanded service span and coverage. The plan includes a multi-year capital program using federal, state, and local funds. Typical local-match assumptions include 20% for vehicles and 50% for pedestrian improvements; GHT estimates maximum WSDOT vanpool reimbursement of \$36,100 per van, with local funds covering the remainder. The primary revenue source is local retail sales tax, supplemented by fares, grants, advertising, and other revenues.

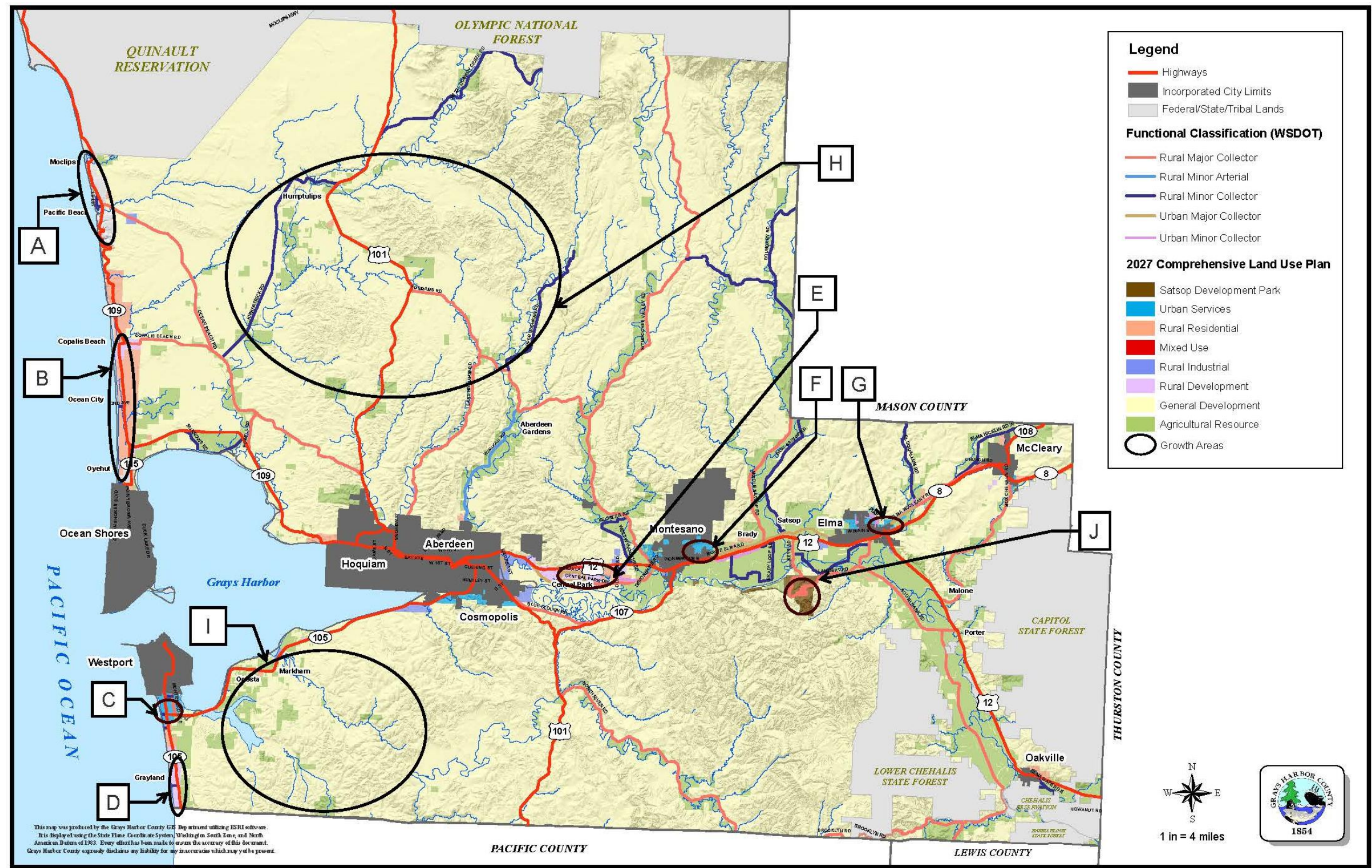
Existing Conditions

The county's multimodal network consists of major state highways supported by approximately 565 miles of county roads and 194 bridges, which together provide the primary links between dispersed rural communities and regional destinations. Public transportation is provided by GHT, which operates fixed-route service, the HarborFlex on-demand service, and ADA paratransit; the system is scheduled to be fare-free in 2026, improving baseline accessibility for residents. Freight rail connects directly to the Port of Grays Harbor, and a regional rail study is underway to strengthen rail-highway interface and goods movement efficiency. Marine facilities include deep-water cargo terminals, marinas, and active commercial fishing hubs that support the county's role in coastal trade and fisheries. Environmental conditions—coastal exposure, sensitive ecosystems, and flood-prone segments—continue to shape system performance and inform preservation, resilience, and access priorities.

Roadway Network

The roadway network relies on a limited number of key corridors to carry most regional travel and freight. County roads provide essential access to small towns, timberlands, and tribal lands (Figure 3.8-1). Functional classifications follow Federal Highway Administration and WSDOT criteria. Principal and minor arterials connect population centers and the port/rail interface, while major and minor collectors serve rural communities and working lands.

Figure 3.8-1. Roadway Functional Classification in Grays Harbor County



Major Highways

The county is served by a small number of state and U.S. highways that provide the primary connections between coastal communities, inland towns, and regional destinations. The county is served by the following four state highways and two U.S. routes:

- SR 8 – SR 8 provides a primary east–west regional transportation connection between U.S. 101 near Olympia and U.S. 12 in Elma, linking Grays Harbor County with the Olympia metropolitan area. The route serves as a key corridor for regional travel, freight movement, and access to state and regional services.
- SR 105 extends south from U.S. 101 near Aberdeen–Hoquiam along the coast. The route serves coastal communities including Westport and Grayland, provides access to coastal recreation areas, and functions as part of the Hidden Coast Scenic Byway and a major tsunami evacuation route.
- SR 115 – The route is a short connector route that links SR 109 to Ocean Shores, providing access to the coastal destination.
- SR 107 – Located entirely within the county, the route is a less than 10-mile long connection between US 101 (Cosmopolis) to US Route 12 (US 12; Montesano). It is a link for freight movement. Along the route there are forested areas, wetlands and sloughs, and access to natural areas.
- SR 109 – Part of the Hidden Coast Scenic Byway, SR 109 extends north from Hoquiam to Copalis Beach, providing access to coastal communities including Seabrook and Pacific Beach. The route supports coastal recreation and beach access and passes Griffiths-Priday State Park. SR 109 continues north to Taholah.
- US 12 – The route runs east–west through the southern part of the county, linking Aberdeen and Montesano to Elma and Oakville. It serves as a major route for both local and through traffic, facilitating access to Interstate 5 and central Washington.
- US 101 – The route is a primary north-south corridor along the coast, connecting communities such as Aberdeen, Hoquiam, and Cosmopolis, extending north toward Jefferson County and south toward Pacific County. It is vital for regional travel and freight.

County Roads

The County maintains a network of county roads serving incorporated cities and unincorporated areas. These roads provide access to rural communities, resource lands, local industries, recreation areas, and state highways. The roads listed below are examples of county-maintained corridors that serve important connectivity functions:

- Ocean Beach and Copalis Beach Roads – Connects Copalis Beach, Pacific Beach and Moclips to SR109 Hoquiam. Ocean Beach Road provides an alternative to SR 109 for access to the north coast.
- Johns River Road – Provides access to rural residences, working lands, and the WDFW's Johns River Wildlife Area, located south of Aberdeen. The corridor parallels the tidal Johns River,

connects to SR 105 near Markham and serves hunting, recreation, and estuary-adjacent properties.

- Satsop-Cloquallum Road – A rural east–west corridor connects the Satsop Valley to areas north of Elma and serves dispersed Residential, Forest, and Agricultural parcels. It provides access toward the Satsop Business Park and links to other county roads in the Cloquallum and Wynoochee valleys.
- Wynoochee-Wishkah Road – A rural connector between the Wynoochee Valley and the Wishkah Valley serves forest lands, large-lot Residential uses, and access to nearby creeks and the Wynoochee River.

Planned Projects

No major capacity-expansion projects, such as lane additions or roadway widenings, are currently programmed in the county. Instead, both WSDOT and the County emphasize preservation, safety, and system rehabilitation. County and state capital programs include roadway repair, bridge maintenance, culvert upgrades, resilience improvements, and alignment modifications, with project lists included in the County's Annual Construction Program and WSDOT's TIP. These investments reflect the County's focus on maintaining the existing network, addressing hazard-related vulnerabilities, and supporting long-term system reliability.

According to the County's Annual Construction Program for 2026, one road project has been planned, the Ocean Beach Road Realignment. Additionally, several bridge, culvert, and emergency-related projects have been outlined in this program. Refer to Appendix C-1 for the list of projects planned along with their categories and the total 2026 estimated expenditure according to the County's Annual Construction Program for 2026. Noteworthy projects include the Ocean Beach Road Realignment Project and Elk Creek/SR 109 Flood Hazard Reduction Project.

Additionally, WSDOT's TIP 2026 – 2031 lists a number of projects that have received funding for construction, improvements, repairs, replacements, or reconstruction. The Karjala Road Project and the Damon Road Improvement Project focus on the construction of new pedestrian facilities and a shared use path for beach access, respectively, thereby focusing on improving multimodal pedestrian-friendly transportation. Refer to Appendix C-2 for the complete list of projects planned for the unincorporated county areas for the upcoming 5 years, along with the project description and the total funding. The list of projects enumerates a number of bridge repair and replacement projects including the Grays Harbor County Bundled Timber Repair Project, the Sickman Ford Bridge Repair Project, the Cranberry Road Drainage Bridge Replacement, the East Hoquiam River Bridge Replacement, and the Garrard Bridge Replacement, among others.

Vehicular Traffic and Circulation

This section describes traffic and circulation conditions in the county, beginning with WSDOT highway classifications and adopted LOS, and followed by an overview of travel patterns, multimodal access, traffic volumes, and localized congestion.

Highway Classifications and Level-of-Service

Table 3.8-1 includes the WSDOT highway classifications and adopted LOS in the county.

Table 3.8-1. Highway and Level-of-Service Classification in Grays Harbor County

WSDOT Route	Segment	Classification	LOS
SR 8	MP 1.1 to 20.63	HSS	C
SR 8	MP 0 to 1.1	HSS	D
SR 12	MP 0 to MP 8.15; MP 9.41 to MP 16.63; MP 18.09 to MP 22.92	HSS	D
SR 12	MP 8.15 to MP 9.41; MP 16.63 to MP 18.09; MP 22.92 to MP 41.71	HSS	C
SR 101	MP 80.39 to 91.17; MP	HSS	D
SR 101	MP 0 to MP 80.39; MP 91.17 to MP 244.31	HSS	C
SR 105	MP 0 to MP 46.62	HRS	C
SR 109	MP 0 to MP 3.25	HRS	D
SR 109	MP 3.5 to MP 40.46	HRS	C

Source: Washington Spatial Data 2025.

MP = milepost

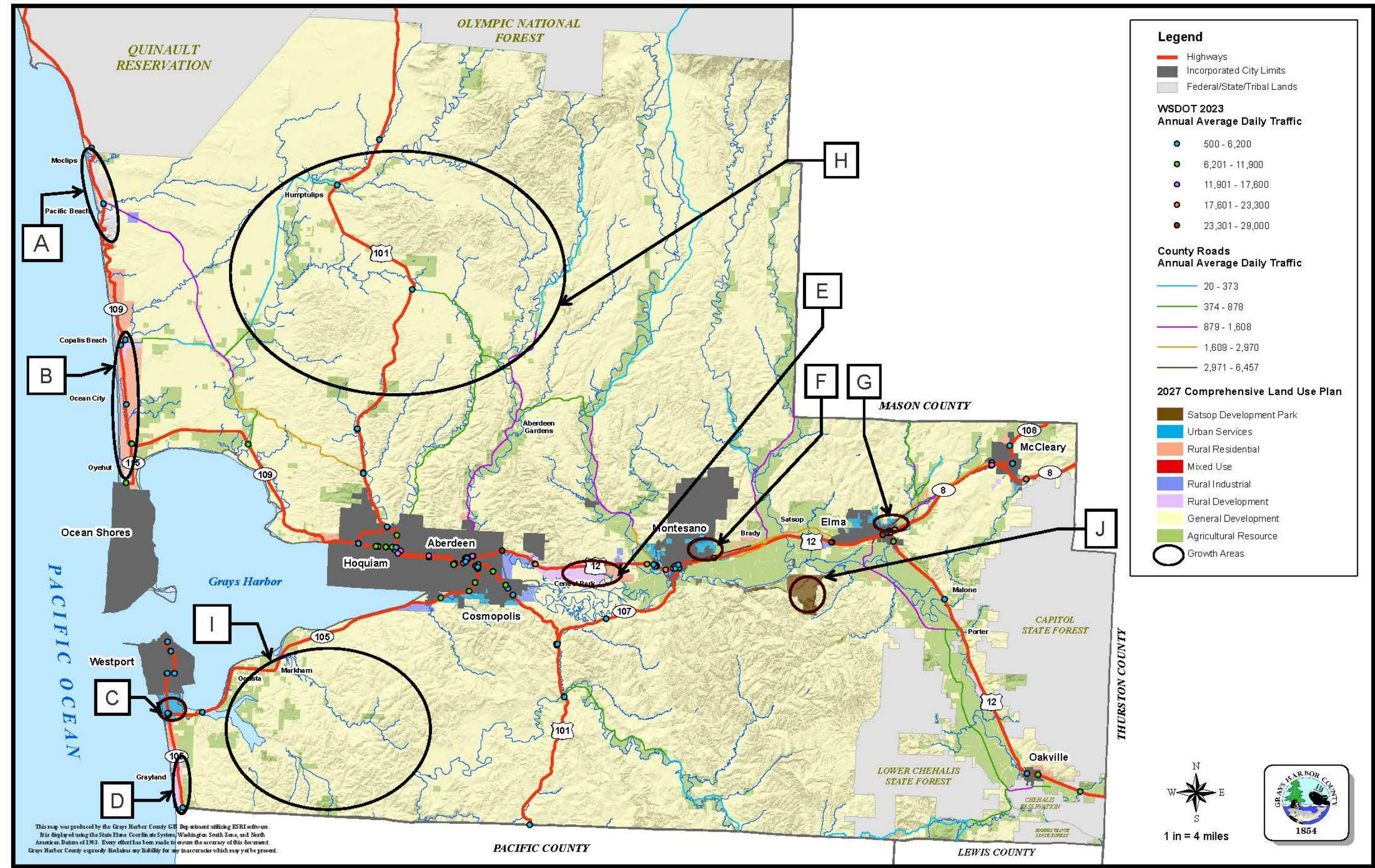
Traffic Volumes and Congestion

Traffic volumes vary widely across the county (Figure 3.8-2), reflecting its rural character and concentrated activity centers. Annual average daily traffic is highest on principal arterials—such as US 12 near Aberdeen and SR 109 near Ocean Shores, where commuter and recreational travel combine with freight activity. Outside these segments, volumes are substantially lower, consistent with rural roadway patterns. Congestion is generally limited to peak travel periods near Aberdeen, Hoquiam, and key river crossings, where constrained roadway geometry and recurring maintenance issues can temporarily reduce capacity. Annual average daily traffic and intersection LOS mapping identify these localized bottlenecks.

Travel Patterns and Behaviors

Travel behavior in the county is shaped by long distances between communities, limited transit frequency in rural areas, and incomplete pedestrian and bicycle networks outside the urban core. Most trips are made by personal vehicle, particularly for work, school, and services, with state routes providing the backbone of commuting and regional travel. Within the Aberdeen–Hoquiam–Montesano corridor, GHT provides fixed-route service that supports somewhat higher transit use and more walkable connections. Beyond these hubs, non-motorized travel remains limited by narrow shoulders, intermittent sidewalks, and sparse land uses, although numerous beaches, trails, and forest-service roads offer recreational walking and cycling opportunities.

Figure 3.8-2. Traffic Volumes in Grays Harbor County



Non-motorized Travel

While active transportation facilities are more continuous within the county's urban centers, there are opportunities for recreational walking and cycling in unincorporated areas. Beaches, lakes, and forested lands offer extensive trail networks, and several state route corridors provide partial shoulder accommodations. In rural communities, multimodal access remains more limited due to roadway geometry, dispersed land use patterns, and long distances between destinations. Existing bike and pedestrian routes and planned facilities are described in the following sections.

Bike and Pedestrian Routes

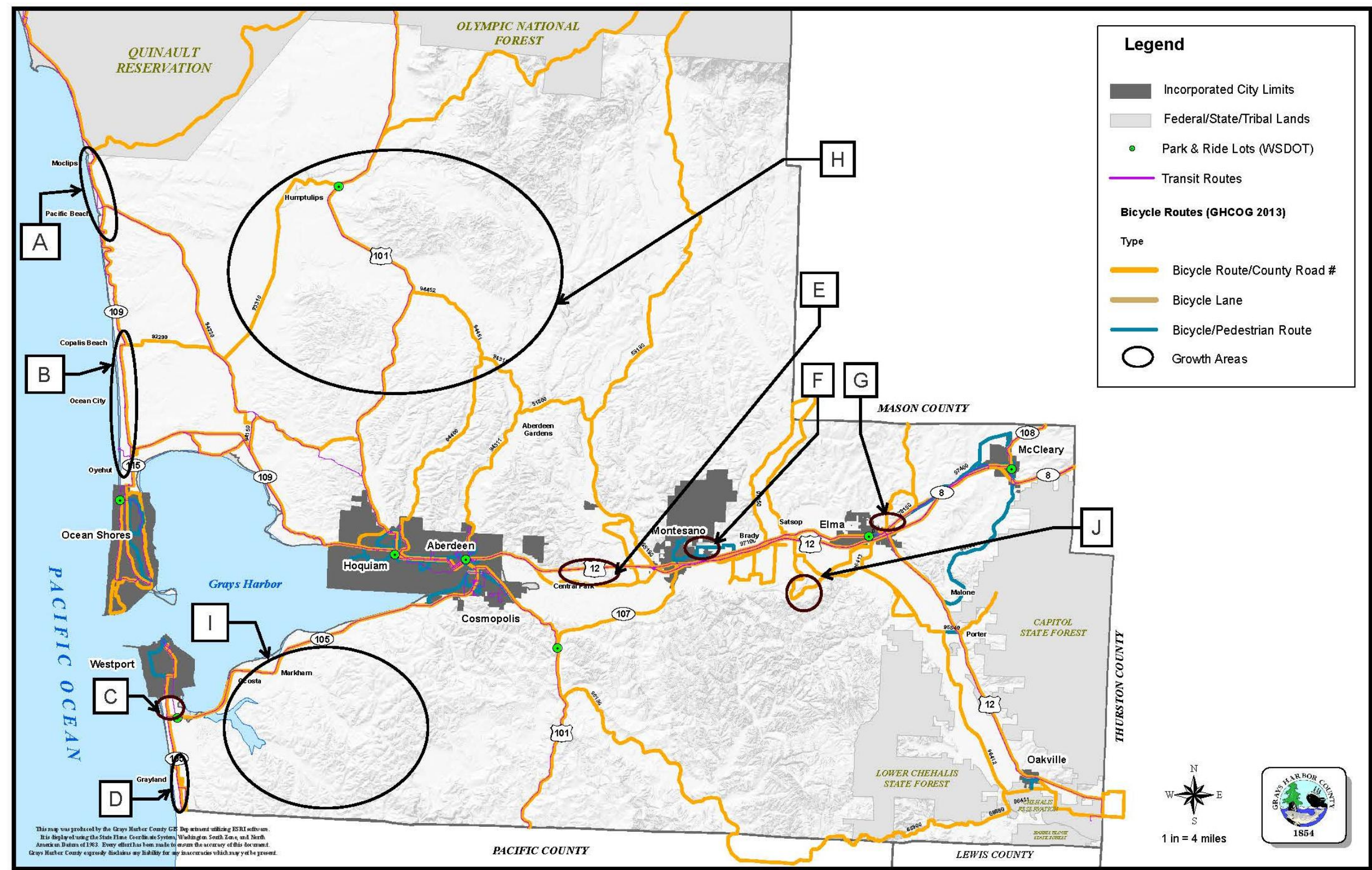
The 1981 Grays Harbor Bike Plan was an early regional effort to meet state requirements, coordinate bicycle routes across jurisdictions, and integrate bicycling into transportation, recreation, and energy planning. It distinguished between utilitarian and recreational cycling, identified a tiered network of corridors and paths, and included early WSDOT bikeway design standards. The plan anticipated very limited funding, assuming incremental development as part of other projects (Grays Harbor Regional Planning Commission 1981).

In 2013, GHCOG updated its county-wide bicycle-route mapping as part of a regionwide effort to modernize and consolidate active-transportation data originally established in the 1981 plan. The mapping update identified existing and planned bicycle corridors using facility-type definitions consistent with WSDOT guidance, including shared roadways, paved-shoulder bikeways, striped bike lanes, and multi-use paths (Figure 3.8-3). These classifications support regional coordination and provide a common basis for local transportation elements and project programming under state and federal funding programs.

- Shared roadway - A standard vehicular lane with no dedicated bicycle markings. Used on low-volume or rural roads where shoulders are narrow or absent.
- Paved shoulder bikeway - A paved shoulder of sufficient width (often 4 to 6 feet) intended to provide separation from traffic.
- Striped bike lane - A portion of the roadway designated for bicycle use by pavement markings and striping.
- Multi-use path/Shared use Trail - A path physically separated from the roadway, typically shared by bicyclists and pedestrians; used where terrain, safety, or recreational connections warrant separation.

The WSDOT TIP 2026-2031 includes planned non-motorized facilities, such as the Karjala Road Project and the Damon Road Improvement Project, which focus on the construction of new pedestrian facilities and a shared use path for beach access, respectively.

Figure 3.8-3. Multimodal Transportation Facilities in Grays Harbor County



System Safety and Reliability

Transportation safety and reliability are influenced by the county's rural roadway conditions, weather patterns, and terrain. High-speed rural highways with limited shoulders, frequent rainfall, and low-visibility conditions contribute to roadway departure and weather-related crashes. Flooding, landslides, and coastal erosion periodically disrupt corridors such as SR 105 and SR 109, as well as several county roads located in floodplains or steep upland terrain. These recurring hazards create reliability constraints that affect residents, visitors, freight, and emergency response. The County's Hazard Mitigation Plan (2024b) identifies these corridors as priorities for long-term resilience improvements.

Maintenance Constraints and Operational Challenges

Recurring roadway maintenance issues in the county include washouts, culvert blockages, drainage failures, slope instability, and storm-related damage—especially in flood-prone areas and along coastal or upland corridors (County 2024b). These conditions drive frequent repairs and temporary closures that affect access and mobility.

Weather-related hazards are a consistent stressor: frequent flooding, landslides, and erosion can overload drainage systems, overwhelm culverts and ditches, and trigger washouts and emergency repairs. The County declared a state of emergency in December 2025 due to widespread flooding, blocked culverts, and road closures. Erosion, landslides, and flooding as a result of storm exposure remains a particular concern along coastal areas, including bridges, SR 105, SR 109, and low-lying county roads. The County's hazard mitigation planning documents identify the following locations as being historical problems: Blue Slough Road, Connor Creek Bridge, SR 109 west of Hoquiam, and SR 109 south of Wreck Creek (County 2024b). In parallel with resurfacing and chip-seal programs that sustain rural road quality, the County manages ongoing bridge postings and occasional closures tied to aging structures and storm damage, and undertakes slope-stabilization projects to address chronic landslide areas (County 2024b).

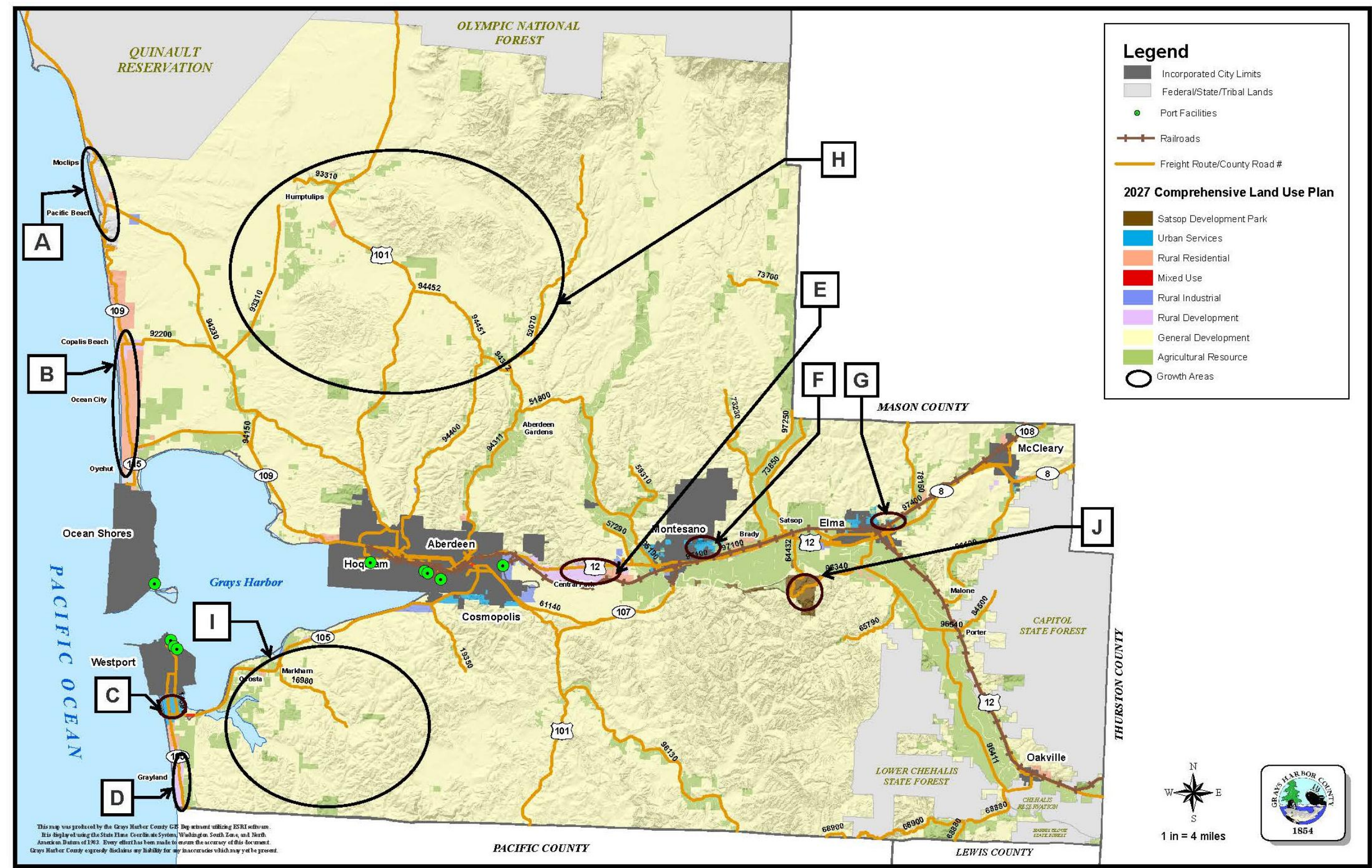
Freight, Port, and Rail Interface

Active rail lines traverse unincorporated areas of the county (Figure 3.8-4), with the Puget Sound & Pacific (PSAP) as the primary operator. While the county has freight rail infrastructure, there is no passenger rail service. Regional freight rail serving the Port of Grays Harbor is critical for moving agricultural exports, automobiles, and other bulk commodities, and industrial spurs and port terminals support major employers in Aberdeen, Hoquiam, and the Satsop Business Park.

Marine Terminals and Intermodal Connections

The Port of Grays Harbor operates four deepwater cargo terminals in Aberdeen and Hoquiam and the Westport Marina, positioning it as one of Washington's key export hubs with direct international access. Commercial fishing and marina facilities are concentrated in Westport and Ocean Shores, and intermodal connections link marine terminals to both rail and highway networks. To address the effects of growing rail traffic on port access and reliability, current projects include the PGH Marine Terminal Rail, Hoquiam River Rail Bridge, and Wishkah River Rail Bridge improvements. In addition, Sierra Pacific Industries functions as a major marine shipping point within the Grays Harbor estuary. Refer to Figure 3.8-4 for the location of rail, freight, and port facilities in the study area.

Figure 3.8-4. Railroads, Ports, and Freight Routes in Grays Harbor County



3.8.2 Potentially Significant Impacts

As the county continues to grow, transportation needs will evolve, increasing demand for reliable highway connections, expanded transit service, and safer multimodal options for walking and biking. Ongoing efforts to resolve rail–roadway conflicts, improve resilience, and expand multimodal access reflect this changing context. Consistent with SEPA, transportation planning must account for environmental constraints and long-term sustainability to ensure the system remains safe, functional, and responsive to future mobility and economic needs.

Based on the trip generation analysis, it is evident that population, housing, and employment growth over the next 50 years will place steadily increasing pressure on the county's transportation network. Higher trip generation across Residential (both Urban and Rural), Commercial, and Industrial land uses will translate into more daily traffic on County roads, increasing congestion at key intersections, and elevating long-term maintenance needs. Rural roadways that were originally designed for low volumes and lower speed travel will experience more frequent peak period delays and greater conflicts between local access and through traffic. As vehicle miles travel rise, the county will face growing demands for roadway preservation, bridge rehabilitation, and targeted capacity or operational improvements on corridors that serve as primary connectors between dispersed communities.

These trends will also influence other modes of transportation. Increased population and employment density will heighten expectations for reliable transit service, expanded demand response coverage, and safer, more continuous active transportation facilities. Rural areas that currently lack sidewalks, shoulders, or bike infrastructure may see more walking and biking activity, intensifying the need for multimodal investments to reduce crash risk and improve access to schools, services, and employment centers. Major county roadways, often the only continuous corridors linking communities, will carry a larger share of regional travel, freight movement, and recreational traffic. As these routes absorb more demand, the County will need to balance safety, mobility, and resilience, particularly in areas vulnerable to flooding, landslides, or climate-related disruptions. Over time, coordinated planning and strategic investment will be essential to ensure the transportation system can support growth while maintaining reliability and protecting quality of life.

Methods of Analysis

For the traffic analysis, assumptions have been made that the roads in the county will experience 1% annual growth in traffic. The traffic operation level with the new development have been analyzed for 2050 as the future year. For this study, 10 areas of the county were identified, with distinct land use patterns, residential settlements, services, and development in each.

Table 3.8-2 and Figure 2-1 illustrate the assumed growth for the alternatives for 10 areas of the county. Trip generation and LOS assumptions for these alternatives is described in this section.

Trip Generation

Trip estimates were developed using the Institute of Transportation Engineers (ITE) Trip Generation Manual, applying a consistent method across the No Action, Moderate Growth, and Growth scenarios (ITE 2025). For Residential uses, dwelling units (DUs) were used as the

independent variable (IV); for non-residential uses, gross floor area (square feet) served as the IV. This approach allows differences among alternatives to reflect changes in land-use quantities rather than changes in methodology.

- For the Mixed-Use designation where the scenario input is Residential, total DUs were evenly split between Single-Family Detached and Multi-family Low-Rise housing (e.g., 74 DUs → 37 single-family + 37 multi-family). This 50/50 DU split was applied uniformly in all three alternatives to keep comparisons consistent. In the 50,000-square-foot “all-alternatives” option for Mixed-Use, the program was represented as a small mixed retail/services cluster (for example, neighborhood strip retail, pharmacy, and gas station), with tenant areas allocated to total 50,000 square feet.
- For Rural Residential/Rural Development, trip generation used the Single-Family Detached Housing land-use category with DUs as the IV, applied across all alternatives. Where a 50,000-square-foot “all-alternatives” option was tested for Rural Development, the non-residential program was represented as a local services mix (for example, fast-casual restaurant, convenience store, and pharmacy) whose combined area equals 50,000 square feet.
- For Urban Services, Residential areas were modeled as Single-Family Detached Housing with DUs as the IV. In the 50,000-square-foot “all-alternatives” services option for Urban Services, the land use input was a supermarket of 50,000 square feet.
- For General Development areas that are residential in nature, Single-Family Detached Housing with DUs as the IV was applied consistently under all three alternatives.
- For Area J (Satsop Development Park), it was represented as a light-industrial/business campus: Warehouse, Industrial Park, and Business Park land uses were each assigned ~330,000 square feet, totaling ~1,000,000 square feet. This configuration reflects a diversified employment program and provides ITE-based trip estimates that capture industrial, distribution, and office-type activities at the park.

Level-of-Service

The number of lanes, functional classification, speed limit, and traffic volumes were used to determine LOS based on the *Simplified Highway Capacity Calculation Method for the Highway Performance Monitoring System* using the tables for the rural two-lane highway for the corresponding speed limits and traffic volume brackets of study area roadways (Margiotta and Washburn 2017). At places where highways were four lanes, the traffic volume was doubled. LOS level C was selected as the threshold for evaluation. Roadway LOS is evaluated as being above or below C based on the traffic volumes.

Overall, Table 3.8-2 illustrates the US and State Routes that were analyzed for determining the Levels-of-Service, as described in the sections that follow, and overall impacts:

Table 3.8-2. US and State Routes Analyzed for LOS and Overall Impacts

Road Name	Functional Classification	No. of Lanes	Speed Limit	Additional Description
SR 109	Urban Minor Arterial within Hoquiam, and Rural Major Collector outside Hoquiam through Ocean Shores junction and up the coast	2-lane rural highway	35-45 mph	Provides access to Areas A and B
US 12	Urban Principal Arterial within Aberdeen and Central Park, and Rural Principal Arterial between Aberdeen – Montesano – Elma – Thurston County	4-lane divided highway	45-55 mph	Provides access to Areas A, B and C
SR 8	Rural Principal Arterial	4-lane divided highway	45-55 mph	Provides access to Area G
SR 115	Urban Minor Arterial within Ocean Shores, Rural Major Collector between Ocean Shores and SR 109	Short 2-lane highway	25-45 mph	Provides access to Area B
SR 108	Rural minor arterial passing through McCleary and Kamilche	2-lane highway entire length	35-50 mph	Functions as bypass of SR 8 (indirect access to Area G)
SR 107	Rural Major Collector	2-lane highway entire length	30-55 mph	Follows Little North River and Chehalis River Corridor; auxiliary route of US 101 (indirect access to Area F)

mph = miles per hour

Impacts Common to All Alternatives

Under all alternatives, increases in population, housing, employment, and associated trip generation would place additional demands on the county's transportation network. The need for transportation mitigation measures increases in direct proportion to population growth and the level of development proposed under each alternative. As travel demand rises, even modest

increases in residents begin to place additional stress on roadways, transit, multimodal facilities, and freight corridors.

Table 3.8-3 illustrates the estimated total number of trips generated by planned new development in areas of potential growth in the unincorporated county area, for each alternative.

Table 3.8-3. Trip Generated in Potential Growth Areas by Alternative in Unincorporated County

Areas of Potential Growth	Total Weekday Daily Trips Generated by Alternative		
	No Action	Moderate Growth	Growth
Area A	5,103	1,469	2,723
Area B	654	800	1,491
Area C	4,660	345	645
Area D	382	800	1,491
Area E	654	800	1,491
Area F	1,009	700	1,291
Area G	1,009	700	1,291
Area H	336	2,345	4,354
Area I	145	1,009	1,863
Area J	9,000	9,000	9,000

Several transportation impacts would occur across all three alternatives in the county because each scenario assumes sustained increases in population, housing, employment, and trip generation. Even though the magnitude of change differs, the underlying pressures on the transportation system are consistent. Some common transportation impacts across all alternatives include the following:

- Increased traffic volumes and roadway wear
- Growing safety concerns on rural corridors
- Increased pressure on transit and demand response services
- Greater need for multimodal facilities, strain on major county roadways
- Increased need for coordinated land use and transportation planning

Alternative 1: No Action

For the No Action Alternative, the transportation system in the county would still experience meaningful impacts due to the projected 5% increase in population, housing, employment, and trip generation, even without changes to existing land use patterns or zoning. Because the county's roadway network is predominantly rural and already constrained in many locations, even modest growth would place additional pressure on infrastructure that was not designed for sustained increases in daily traffic volumes.

Traffic and Level-of-Service

Overall, traffic volumes would rise across Residential, Mixed-Use, Commercial, and Industrial areas, but the increases would be incremental rather than transformative. Table 3.8-4 illustrates the daily total weekday trips for all areas under the No Action Alternative, along with the LOS for all the areas in the future, both with the background conditions, and with development added. In the background conditions, Areas A, C, D, F, G, H, and I would have a LOS of C or better, while Areas B and E would have a LOS of C or worse. In the future, with development added to the background, Areas D, F, G, H, and I would have a LOS of C or better, while the rest would have a LOS of C or worse.

Table 3.8-4. Alternative 1: Weekday Trips and LOS in Growth Areas of Unincorporated County

Areas of Potential Growth	Total Weekday Daily Trips Generated by new Development	LOS Future with Background	LOS Future (Background + Development)
Area A	5,103	Better than LOS C	LOS C or worse
Area B	654	Better than LOS C	Better than LOS C
Area C	4,660	Better than LOS C	LOS C or worse
Area D	382	Better than LOS C	Better than LOS C
Area E	654	LOS C or worse	LOS C or worse
Area F	1,009	Better than LOS C	Better than LOS C
Area G	1,009	Better than LOS C	Better than LOS C
Area H	336	Better than LOS C	Better than LOS C
Area I	145	Better than LOS C	Better than LOS C
Area J	9,000	Data not available	Data not available

Health and Safety Risks

Under the No Action Alternative, there would be general safety and health risks because of the projected increase in traffic volumes in the different regions of the study area. Higher traffic volumes may increase exposure to roadway crashes, turning movement collisions, or conflicts at uncontrolled intersections, though relatively lesser than the higher growth scenarios.

Multimodal Access and Mode Shift

Walking and biking activity would increase around mixed-use centers, schools, and commercial areas. However, the No Action Alternative would not generate enough density to support major multimodal investments. Instead, the County would face pressure to address basic safety needs—shoulder widening, sidewalk infill, and improved crossings, where pedestrian activity is already present.

GHT would see higher ridership and more demand for response trip requests, particularly in dispersed Residential areas where fixed route service is limited. While the system could likely absorb these increases with operational adjustments, service reliability and scheduling flexibility would become more constrained.

Alternative 2: Moderate Growth

The Moderate Growth Alternative would result in more pronounced increases in daily traffic volumes across Residential, Mixed-Use, Commercial, and Industrial areas. Several corridors may begin to experience recurring congestion during peak periods, particularly near schools, employment centers, and commercial nodes. Turning movements at unsignalized intersections may become more difficult, and localized bottlenecks would emerge where rural roads intersect with major county or state routes. These operational pressures would exceed those anticipated under the No Action Alternative and may require more frequent maintenance and targeted improvements to preserve roadway performance.

Traffic and Level-of-Service

Traffic and LOS across major intersections will rise, leading to increased need for coordinated planning and strategic investment. Table 3.8-5 illustrates the daily total weekday trips for all areas under the Moderate Growth Alternative, along with the LOS for all the areas in the future, both with the background conditions, and with the development added. In the background conditions, Areas A, C, D, F, G, H, and I would have a LOS of C or better, while Areas B and E would have a LOS of C or worse. In the future, with development added to the background, Areas C, D, F, G, H, and I would have a LOS of C or better, while the rest would have a LOS of C or worse.

Table 3.8-5. Alternative 2: Weekday Trips and LOS in Growth Areas of Unincorporated County

Areas of Potential Growth	Total Weekday Daily Trips Generated by New Development	LOS Future with Background	LOS Future (Background + Development)
Area A	1,469	Better than LOS C	LOS C or worse
Area B	800	Better than LOS C	LOS C or worse
Area C	345	Better than LOS C	Better than LOS C
Area D	800	Better than LOS C	Better than LOS C
Area E	800	LOS C or worse	LOS C or worse
Area F	700	Better than LOS C	Better than LOS C
Area G	700	Better than LOS C	Better than LOS C
Area H	2,345	Better than LOS C	Better than LOS C
Area I	1,009	Better than LOS C	Better than LOS C
Area J	9,000	Data not available	Data not available

Health and Safety Risks

A 10% increase in population and employment would amplify existing safety concerns on rural corridors. Higher traffic volumes may increase exposure to roadway departure crashes, conflicts at uncontrolled intersections, and turning movement collisions at driveways serving commercial and industrial uses. These conditions could elevate the need for safety countermeasures such as shoulder widening, improved delineation, and intersection upgrades.

Multimodal Access and Mode Shift

As residential and employment density increases, walking and biking activity would rise, especially in mixed-use areas and near schools and commercial centers. However, the county's existing multimodal network, characterized by discontinuous sidewalks, narrow shoulders, and limited crossings, would not adequately support this growth. Pedestrian and bicycle safety risks would become more pronounced, particularly along rural corridors with higher speeds and limited visibility. The Moderate Growth Alternative would therefore intensify the need for targeted multimodal investments, including sidewalk infill, shoulder widening, shared use paths, and improved pedestrian crossings.

Transit demand would increase substantially under the Moderate Growth Alternative. GHT's fixed route services may experience crowding during peak periods, while demand response services would face higher trip requests and longer travel times due to dispersed residential growth. Without targeted service enhancements such as expanded coverage, improved frequency, or new circulation routes in Mixed-Use areas, transit reliability could decline. This scenario highlights the need for operational adjustments and potential fleet expansion to meet rising mobility needs.

Alternative 3: High Growth

The High Growth Alternative would generate the most significant increase in daily traffic volumes across all land uses: Residential, Mixed-Use, Commercial, and Industrial. Major county roadways would experience sustained congestion during peak periods, with some corridors approaching or exceeding their functional capacity. Turning movements at unsignalized intersections would become increasingly difficult, and delays at key junctions with state routes would intensify. Pavement deterioration would accelerate, requiring more frequent resurfacing and structural rehabilitation, particularly on corridors that serve freight or connect inland communities to coastal destinations.

Traffic and Level-of-Service

Traffic and LOS across major intersections will rise, leading to increased need for coordinated planning and strategic investment. Table 3.8-6 illustrates the daily total weekday trips for all areas under the High Growth Alternative, along with the LOS for all the areas in the future, both with the background conditions, and with the development added. In the background conditions, Areas A, C, D, F, G, H, and I would have a LOS of C or better, while Areas B and E would have a LOS of C or worse. In the future, with development added to the background, Areas D, F, G, H, and I would have a LOS of C or better, while the rest would have a LOS of C or worse.

Table 3.8-6. Alternative 3: Weekday Trips and LOS in Growth Areas of Unincorporated County

Growth Area	Total Weekday Daily Trips Generated by New Development	LOS Future with Background	LOS Future (Background + Development)
Area A	2,723	Better than LOS C	LOS C or worse
Area B	1,491	Better than LOS C	LOS C or worse
Area C	645	Better than LOS C	LOS C or worse

Growth Area	Total Weekday Daily Trips Generated by New Development	LOS Future with Background	LOS Future (Background + Development)
Area D	1,491	Better than LOS C	Better than LOS C
Area E	1,491	LOS C or worse	LOS C or worse
Area F	1,291	Better than LOS C	Better than LOS C
Area G	1,291	Better than LOS C	Better than LOS C
Area H	4,354	Better than LOS C	Better than LOS C
Area I	1,863	Better than LOS C	Better than LOS C
Area J	9,000	Data not available	Data not available

Health and Safety Risks

Higher traffic volumes and increased freight activity would amplify existing safety risks across the rural network. Roadway departure crashes, conflicts at uncontrolled intersections, and turning movement collisions would become more frequent as exposure increases. Freight-related safety concerns would be more pronounced near Industrial land uses, where heavy vehicle traffic would grow substantially. Climate vulnerable corridors, particularly those prone to flooding, storm surge, or landslides, would pose greater operational and safety risks as more travelers rely on them for daily mobility. Emergency response times could be affected by recurring congestion and limited detour options on the rural network.

Multimodal Access and Mode Shift

Walking and biking activity would increase substantially in mixed-use areas and near schools, commercial centers, and employment hubs. However, the county's existing multimodal infrastructure characterized by discontinuous sidewalks, narrow shoulders, and limited crossings would not be sufficient to support this growth. Safety risks for pedestrians and bicyclists would rise, particularly along high-speed rural corridors where multimodal facilities are limited or absent. The High Growth Alternative would create a clear need for a county-wide multimodal network, including shared use paths, continuous shoulders, sidewalk infill, and enhanced pedestrian crossings.

Transit demand would increase sharply under the High Growth Alternative. Fixed route services may experience crowding, and demand response operations would face higher trip volumes, longer travel distances, and more complex scheduling needs. Without substantial service expansion such as additional vehicles, increased frequency, extended hours, and potentially new routes, transit reliability and coverage would decline. This scenario would likely require long-term planning for fleet growth, new transit hubs or transfer points, and enhanced coordination with local jurisdictions.

3.8.3 Avoidance, Minimization, and Mitigation

Impacts are avoided and minimized under the No Action scenario which is likely to require only limited operational and preservation improvements. Other alternatives result in the need for

safety enhancements, multimodal upgrades, freight-supportive infrastructure, expanded transit capacity, major corridor-level improvements, and climate-resilient design.

The following section describes potential avoidance, minimization, and mitigation in general terms. Specific mitigation strategies for each alternative are described in Appendix C-3.

Mitigation reflects not only the type of development anticipated, but the increasing scale of improvements needed as population and travel activity grow.

Incorporated Plan Elements

Under all alternatives, higher density land use designations are encouraged in areas served by transportation facilities that are not vulnerable to flooding, erosion, or landslides. To support this, County subdivision regulations require that new development comply with county road standards, including necessary dedications and offsite improvements. These road standards ensure that all new development constructs transportation infrastructure that meets minimum County requirements.

Applicable Regulations and Commitments

- Subdivision-related transportation impacts may be required to be mitigated in accordance with Grays Harbor County Code (GHC) 16.20.260, which addresses off-site transportation improvements associated with development.
- Grays Harbor County maintains a Six-Year Transportation Improvement Program (TIP), which is updated periodically and identifies planned improvements to county-maintained roads and bridges. Projects included in the County TIP may address transportation needs or impacts associated with growth in unincorporated areas.
- Improvements to state highways within Grays Harbor County are planned and programmed separately through the Washington State Department of Transportation (WSDOT) Transportation Improvement Program (TIP) and related state and regional planning processes.

Other Potential Mitigation Measures

Other potential transportation mitigation measures the County could implement include the following:

- Safety Enhancements – These measures such as rumble strips, improved delineation, and targeted shoulder widening would help mitigate roadway departure risks on high-speed rural segments. Freight activity associated with Industrial land uses would require pavement strengthening and improved turning radii at key access points.
- Roadway Operations and System Management – These measures could include adaptive traffic control and signal timing improvements at key intersections, roundabout feasibility assessments at high-collision or high-delay intersections, enhanced access management policies, and freight-specific operational strategies.
- Roadway Preservation, Resilience, and Structural Improvements – These measures could include accelerated pavement preservation cycles to address increased vehicle miles traveled,

bridge and culvert modernization, climate-resilient design upgrades on flood-prone corridors, and slope stabilization and landslide mitigation along vulnerable rural corridors.

- **Transit and Mobility Enhancements** – These measures could include transit stop upgrades (for example, lighting, shelters, ADA-compliant boarding areas), park-and-ride expansion near mixed-use centers, transit signal priority on corridors with high ridership, and mobility-on-demand or micro transit pilots in areas where fixed-route service is not feasible.
- **Active Transportation and Complete Streets** – These measures could include complete streets policies, safe routes to school improvements, county-wide bicycle network planning, and pedestrian safety enhancements.
- **Travel Demand Management (TDM)** – These measures could include employer-based TDM programs, tourism-focused TDM strategies during peak recreational seasons, and parking management strategies in high-demand areas.
- **Land-Use and Development Coordination** – These measures could include adoption of minimum LOS standards, requirements for transportation analysis to identify and mitigate development impacts to roadways, clustered development incentives in Mixed-Use areas, requirements for internal circulation plans in new subdivisions and commercial developments, and new road design standards.
- **Emergency Response and Network Redundancy** – These measures could include secondary access planning for communities with limited evacuation routes, re-identified detour routes with signage, and coordination with emergency services to ensure roadway improvements support response times as population grows.

3.8.4 Significant Unavoidable Adverse Impacts

Even with mitigation, some adverse transportation impacts would remain unavoidable across all growth scenarios in the county:

- Higher traffic volumes on rural arterials and collectors would result in more frequent congestion, longer travel times, and accelerated pavement and bridge deterioration.
- There would be increased safety risks, particularly roadway-departure crashes, turning-movement conflicts, and freight-related collisions because of the county's high-speed rural roadway geometry and limited redundancy in the network.
- An increase in conflicts between vehicle and non-motorized traffic would occur because the rural context limits the feasibility of continuous sidewalks, bike lanes, and protected crossings.
- There would be an increase in disruption caused by periodic closure of climate-vulnerable corridors as more travelers rely on a limited set of major county roadways.

3.9 Public Services and Utilities

This section evaluates how the land use alternatives could affect the provision, adequacy, and financing of public services in the unincorporated county area. Public services include law enforcement, fire protection and emergency medical services (EMS), parks and recreation, schools, and utilities including electrical systems, water supply, wastewater, and solid waste.

3.9.1 Affected Environment

This section provides an overview of the regulatory framework governing the public services and utilities in the county and a summary of the existing environmental and operational conditions. The affected environment includes the following public services and utilities:

- Law Enforcement
- Fire and EMS
- Parks and Recreation
- Schools
- Electric System
- Water Systems
- Wastewater/Sanitary Sewer
- Solid Waste

Regulatory Setting

Public services and facilities in the county are governed by a combination of federal, state, and local regulations. Federal statutes such as the Safe Drinking Water Act (SDWA), and Clean Water Act (CWA) establish baseline requirements that state and local governments must implement. State regulations (WAC 246-290/291, RCW 36.94, RCW 90.48, and RCW 90.46) establish standards for water supply reliability, resource protection, and wastewater management; these requirements are implemented locally through County programs and facility plans.

The County's existing Comprehensive Plan includes a utility element, and its land use element includes policies related to public facilities, parks, and utilities within unincorporated areas. Under the GMA, the County is not subject to the comprehensive planning requirement to include a capital facilities and utilities element and ensure that public facilities are adequate to serve planned development. However, the County has adopted a variety of plans addressing public services and utilities, including the existing County Comprehensive Plan, and multiple water system and sewer facility plans.

Local governance is provided primarily through GHCC Titles 8, Health and Safety, and 13, Public Services, which establish requirements for onsite sewage, solid waste collection and disposal, system connection, water availability determination, fire flow, watershed protection, cross-connection safety, sewer hookup, and rate structure. The *Grays Harbor County Sewer System Design Standards* (2025) define engineering, testing, and construction criteria for sewer system components (for example, including gravity sewer mains and laterals, side sewers, infiltration and inflow control, pressure sewer systems, pump stations and grinder pump criteria,

and grease interceptors). Any extension must comply with County standards and applicable Ecology regulations.

The following subsections describe the statutory and policy context governing delivery of public services and utilities in the unincorporated county area, outlining relevant federal and state requirements, County plans and development regulations, interagency coordination mechanisms, and provider responsibilities for each service area.

Law Enforcement

Law enforcement in unincorporated areas is provided by the Grays Harbor County Sheriff's Office. Incorporated cities operate their own municipal police departments, and mutual aid agreements allow the County and cities to coordinate services as needed. The Sheriff's Office is responsible for county-wide patrol, criminal investigations, corrections operations, civil services, and special operations. The proposed Comprehensive Plan's public facilities and utilities policies provide the overarching framework for how public safety services are considered in land use decisions within unincorporated areas.

Fire and Emergency Medical Services

Fire and EMS in unincorporated areas are primarily provided by County fire protection districts, with support from regional fire authorities (RFA) and county-wide EMS agencies. Providers participate in the coordinated Grays Harbor EMS system, which establishes dispatch, training, and support protocols. Unincorporated areas are served by 11 fire protection districts and 2 RFAs. Applicable requirements related to fire flow and system connections are implemented through GHCC Titles 8 and 13 and related design standards.

Parks and Recreation

Washington State Parks manages state park lands in the unincorporated county area under statewide mandates related to habitat protection, public access, shoreline management, and outdoor recreation. The Grays Harbor County Parks Department is the local authority for county park lands and facilities. Parks planning in unincorporated areas is guided by County-level master planning conducted by the Parks Department and aligned with the proposed Comprehensive Plan's public facilities and utilities policies.

Schools

The county is served by 15 school districts that collectively cover incorporated and unincorporated areas. While school districts are independent local agencies, their facility planning and service boundaries inform, and are referenced by, County planning for public services and utilities in unincorporated areas.

Electrical and Telecommunications Systems

There are two electric service providers in the county: Grays Harbor Public Utility District (PUD) and McCleary Light and Power. Electric supply for both are sourced from the Bonneville Power Administration (BPA).

Grays Harbor PUD provides electric service across most of the urban and rural areas of the county.

The PUD also provides telecommunication infrastructure. McCleary Light and Power supplies electricity within the City of McCleary and to about 200 customers in the surrounding unincorporated county.

Wastewater/Sanitary Sewer

Wastewater service is guided by state statutes and rules (RCW 36.94, 90.48, and 90.46) that guide wastewater and reclaimed water management. Local implementation, covering sewer hookups, connection standards, cross-connection control, and rate structures, is governed by GHCC Titles 8 and 13 and the sewer system design standards (County 2025). The County Environmental Health Division regulates onsite sewage systems (OSS).

Solid Waste

The Utilities and Development Division is the county authority responsible for solid waste management, including transfer and disposal services, and compliance with applicable state regulations. Solid waste programs are implemented pursuant to the County's adopted Solid & Hazardous Waste Management Plan for Years 2020 to 2025 (2021), and through contracts or agreements with service providers, consistent with GHCC and state requirements.

Existing Conditions

This section provides an overview of existing public service conditions in the county, including law enforcement, fire protection and EMS, parks and recreation facilities, public schools, and utility infrastructure, establishing a baseline for evaluating potential impacts associated with each alternative. Table 3.9-1 summarizes the public services available for each of the proposed growth areas.

Table 3.9-1. Public Services Available in Each of the Growth Areas

Growth Area	Water Service	Sewer Service	Grays Harbor Fire District	School District
A	Pacific Beach Water System	Pacific Beach/Moclips Sewer System	Pacific Beach, GHFD #8	North Beach
B	Haven by the sea Sea View Ocean City Hogan's Corner	None Illahee/Oyehut	Copalis Beach, GHFD #7	North Beach
C	City of Westport	City of Westport	South Beach Regional Fire Authority	Ocosta
D	Grays Harbor Water District #1	None	South Beach Regional Fire Authority	Ocosta

Growth Area	Water Service	Sewer Service	Grays Harbor Fire District	School District
E	Grays Harbor Water District #2	None	Brady, Fire District 2	Aberdeen Montesano
F	City of Montesano	Unknown	Brady, Fire District2	Montesano Satsop
G	City of Elma	City of Elma Unserved	East Grays Harbor Fire and Rescue, Fire District 5	Elma
H	Small systems, individual wells	None	Humptulips, Fire District 17 Wishkah, Fire District 10 Brady, Fire District 2 Unserved	Lake Quinault Hoquiam Wishkah Valley
I	Small systems, individual wells	None	South Beach Regional Fire Authority North River	Ocosta
J	Port of Grays Harbor	Port of Grays Harbor	East Grays Harbor Fire and Rescue, Fire District 5	Elma

GHFD = Grays Harbor Fire District

Law Enforcement

Several factors shape current law enforcement conditions. The county's large and sparsely populated geography creates challenges for timely response to calls for service. While substations and resident-deputy assignments improve coverage, long travel distances remain a constraint. Staffing levels and clearance rates also indicate limited investigative capacity and patrol availability, and the agency, like many rural departments, faces ongoing recruitment and retention challenges.

As of 2024 data reporting, the Sheriff's Office is staffed by 60 sworn officers and 13 civilian staff, for a total of 73 employees (US Crime Review 2024). This staffing level equates to approximately 1.9 officers per 1,000 residents, reflective of rural, non-metropolitan staffing levels.

According to information provided by Sheriff Darrin Wallace, Grays Harbor Sheriff's Office, in November 2025, the Sheriff's Office is down three patrol deputy positions and two corrections deputy positions from 2021 staffing levels (Wallace 2025).

Fire and Emergency Medical Services

Station distribution, staffing levels, and available apparatus influences response times across the county's large, predominantly rural and coastal service areas. Unincorporated areas are served by 11 active fire protection districts and 2 RFAs operating multiple stations across remote rural landscapes, coastal corridors, forested areas, and small communities (Table 3.9-2). EMS

coverage is provided through a combination of Fire District EMS units, the Quinault Nation Ambulance program, Olympic Ambulance, and South Beach RFA EMS.

Geographic conditions significantly shape service delivery. Long travel distances, limited roadway connectivity, and mixed coastal and forested hazards affect response times and require distributed stations and multi-agency coordination. Seasonal tourism along the coast increases call volumes in districts such as Fire District 7, Fire District 8, and South Beach RFA. Flood-prone corridors, especially near riverine deltas and throughout the South Beach area, create additional constraints for emergency access, response reliability, and emergency facility siting.

Table 3.9-2. Fire and Emergency Medical Services Providers in Unincorporated County

Provider Type	Agency Name	Primary Service Area	Notes / Coverage Details
Fire District	Fire District 1: Oakville	Rural Oakville region	Serves unincorporated Oakville-area communities.
Fire District	Fire District 2: Brady/Central Park/Wynoochee	East of Aberdeen and Montesano	Provides fire/EMS to unincorporated Central Park, Brady, and Wynoochee areas.
Fire District	Fire District 4: Amanda Park/Neilton/Quinault	Upper Quinault Valley	Serves rural communities near Quinault and Amanda Park.
Fire District	Fire District 6: North Hoquiam/Grays Harbor County	Rural areas north of Hoquiam	Provides fire/EMS to outlying unincorporated areas.
Fire District	Fire District 7: Copalis Beach/Ocean City	North Beach unincorporated coastal areas	Multi-station district serves Copalis Beach, Ocean City, and Copalis Crossing.
Fire District	Fire District 8: Pacific Beach	Unincorporated Pacific Beach region	Coastal service includes Moclips-adjacent areas.
Fire District	Fire District 10: Wishkah/East Hoquiam	Wishkah Valley	Multiple stations cover rural valleys and forest-fringe areas.
Fire District	Fire District 12: McCleary (Rural)	Surrounding McCleary, outside city limits	Serves unincorporated fringe around McCleary.
Fire District	Fire District 15: North River/Artic	North River & Artic communities	Covers remote, low-density service area.
Fire District	Fire District 17: Humptulips/Axford Prairie	US-101 corridor north of Hoquiam	Serves wide-area rural and forested communities.

Provider Type	Agency Name	Primary Service Area	Notes / Coverage Details
RFA	East Grays Harbor Fire & Rescue (EGHFR)	Unincorporated areas east of Elma	Formed from Fire District 5 and Elma; serves rural areas outside Elma city limits.
RFA	South Beach RFA	Ocosta, Grayland, North Cove, and rural South Beach	Formed from Fire Districts 3, 11, and 14; covers substantial unincorporated coastline.
EMS	Quinault Nation Ambulance	Upper Quinault Valley	Provides EMS support in tribal and adjacent unincorporated areas.
EMS	Olympic Ambulance	Regional service	Supplements EMS in unincorporated areas as part of Grays Harbor EMS network.
EMS	South Beach RFA EMS	South coastal unincorporated areas	EMS arm of South Beach RFA serving rural coastal communities.

Parks and Recreation

National, state, and County parks collectively provide a broad array of outdoor opportunities in unincorporated Grays Harbor County, from off-road vehicle (ORV) recreation to beach access and coastal wildlife viewing. These facilities support access to shorelines, rivers, trails, camping, picnicking, habitat preservation, and regional tourism. Table 3.9-3 summarizes the primary parks and recreation areas in the unincorporated county area, identifying their type and general setting across the county.

Table 3.9-3. Parks and Recreation Area in Unincorporated Grays Harbor County

Park Name	Type	Location / Setting
Twin Bridges County Park	County Park	Near Montesano; rural unincorporated area
Vance Creek County Park	County Park	Near Elma; unincorporated
Straddleline ORV Park (formerly Grays Harbor ORV Park)	County Park	Rural eastern county
Ocean City State Park	State Park	Unincorporated Ocean City area north of Ocean Shores
Pacific Beach State Park	State Park	Unincorporated Pacific Beach area
Griffiths-Priddy Ocean State Park	State Park	Mouth of the Copalis River; rural coastal

Park Name	Type	Location / Setting
Twin Harbors State Park	State Park	South of Westport; partially outside city limits
Westport Light State Park	State Park	Adjacent to Westport; includes unincorporated portions
Bottle Beach State Park	State Park	South shore of the county; east of Westport
Lake Sylvia State Park	State Park	Adjacent to the north boundary of Montesano
Schafer State Park	State Park	North of Montesano
Grays Harbor National Wildlife Refuge	National/Federal	Northshore of Grays Harbor, partially within Hoquiam
Olympic National Park	National/Federal	Northeast corner of the county

A portion of Olympic National Park extends into the northeast county area near Lake Quinault, providing access to park amenities including campgrounds, trails, and boat launches. The park encompasses nearly 1 million acres across several counties and features diverse ecosystems, including temperate rain forests, mountains, glaciers, coastline, and areas of cultural and natural history.

Local parks include Twin Bridges County Park, Vance Creek Park, and Straddleline ORV Park, which include day-to-day operations with local recreation infrastructure and managing daily operations, maintenance, and safety. The County's Parks program is documented in the official Parks Department listings.

Schools

Unincorporated areas are served by small, rural school districts that operate across geographically dispersed communities. Operations are shaped by rural conditions, such as long travel distances, limited population density, and smaller student bodies. Table 3.9-4 lists schools in unincorporated areas of the county.

Schools in unincorporated areas typically enroll fewer than 250 students, and often combine multiple grade levels within a single building. While this structure supports operational efficiency, it can limit course variety, extracurricular offerings, and access to specialized staff. These districts also serve large geographic catchment areas, leading to long bus routes, higher transportation and operational costs, and dependence on single-campus districts for all grade levels. Additionally, rural schools often rely on older facilities with limited capital funding due to the smaller tax bases.

Table 3.9-4. Schools in Unincorporated Grays Harbor County

School Name	Community/City	District	Enrollment (2024-2025)
Wishkah Valley Elementary/High	Rural north of Aberdeen	Wishkah Valley SD	178
Lake Quinault School	Amanda Park	Lake Quinault SD	207
Pacific Beach Elementary	Pacific Beach	North Beach SD	91
Satsop Elementary School	Satsop	Satsop SD	63
Taholah Elementary/Middle/ High	Taholah	Taholah SD	192
North River School ^[a]	Brooklyn/Rural	North River SD	61
Mary M. Knight School	Matlock (unincorporated)	Mary M. Knight SD	184

Source: IES 2025.

^[a] The school is geographically located in Pacific County, but does serve Grays Harbor County.

SD = school district

Electrical and Telecommunication Systems

Grays Harbor PUD provides electric service to approximately 45,000 customers across urban areas (for example, Aberdeen and Hoquiam) and rural parts of the county. The system consists of approximately 1,505 miles of distribution line, 215 miles of transmission line, and 36 substations. Nearly 90% of the county's electric supply is carbon-emission-free, primarily sourced from the BPA. Recent system upgrades include vegetation management, pole replacements, and other upgrades to improve system reliability.

In addition, PUD also operates telecommunication services and fiber optic network that make high-speed telecommunications accessible to many areas of the county that might not otherwise have this service available. The system consists of approximately 300 miles of fiber optic. The network also provides infrastructure to support the cellular high-speed network deployment for the residents of the county. In 2025, using grant money provided by the Washington State Broadband Office, the Grays Harbor PUD and contract crews began a major fiber optic expansion project in the South Elma/Cedarville area. When completed, the project will bring the utility fiber network and access to five internet service providers to 500 previously under or unserved east county residents.

Water Supply Systems

Water service in the county is provided by a mix of PUDs, cities, private water systems, and groundwater wells serving individual properties. Several cities extend service into adjacent unincorporated areas and plan for future service areas based on projected growth:

- **Elma** – The city's 2013 water system plan is in the process of being updated and is not currently available. The system has a planned capacity to serve a total of 2,713 equivalent residential units (ERU) (Eaton, pers. comm. 2026).

- **McCleary** – The water system plan anticipates Rural Residential and General Development zoning in its unincorporated service area and an annual growth rate of 0.5% per year or 5% per decade through 2037. The City of McCleary requires annexation as a condition of water service (Gray and Osborne, Inc. 2020).
- **Montesano** – The water system plan indicates an annual growth rate of 0.8% (8% per decade) within areas inside and outside of city limits. Current source production is adequate to meet demand for the 10-year forecast period through 2032 (Montesano 2022).
- **Ocean Shores** – The plan anticipates an annual growth rate of 2% or 20% per decade for its water service area through 2035 (Pace Engineers 2016).
- **Westport** – The water system plan anticipates R-2 and R-3 zoning in its unincorporated service area and projects an annual growth rate of 0.65 % or 6.5% per decade through 2045 (Gray and Osborne, Inc. 2025).

County-operated systems in unincorporated communities include the following:

- **Pacific Beach/Moclips Public Water System** – Serves Pacific Beach, Moclips, and Seabrook. The system uses three wells, two ground-level storage tanks, two below-grade storage tanks and four booster pump stations. The plan anticipates 3.3% annual growth from 2016 to 2036, with a total demand of 1,442 residential and 497 commercial ERUs. Supply is adequate for the planned growth, though additional storage is needed to meet the 20-year growth projections (Gibbs and Olson 2016).
- **Hogan's Corner Water System** – Serves Ocean City State Park, the Illahee/Oyehut Area, Hogan's Corner, and the Quinault Beach Resort. Water is sourced from two wells (70 feet and 121 feet deep) feeding a 160,000-gallon reservoir, from which water is pumped to the distribution system using booster pumps. The water system plan including growth assumptions and capacity are not available for this system.
- **Ocean City Water System** – Serves the Ocean City adjacent to and surrounding Ocean Boulevard. The system consists of four wells and a 20,000-gallon reservoir for distribution. The water system plan including growth assumptions and capacity are not available for this system.
- **Haven by the Sea & SeaView Estates Systems** – Serves the Copalis Beach area (Haven by the Sea plats). The system relies on a single well to meet water production requirements. The Haven by the Sea water system plan anticipates 2% annual growth from 2023 through 2038 with a total of 126 residential and 30 commercial ERUs (County 2018).

There are three public water districts serving the unincorporated county area:

- **Water District No. 1 (Grayland)** – Two groundwater wells, a 300,000-gallon steel tank and a 150,000-gallon concrete reservoir. Growth projections are based on 0.13% annual growth rate. The Grays Harbor County Water District No. 1 water system serves 817 ERUs and is approved for 1,072 ERUs (Grays Harbor County Water District No. 1 2022).
- **Water District No. 2 (Central Park)** – Two groundwater wells. The water system plan including growth assumptions and capacity are not available for this system.

- **District No. 3/8 (Neilton)** – Two groundwater wells and a 60,000-gallon reservoir (County 2024a). The water system plan including growth assumptions and capacity are not available for this system.

In addition, many rural parcels, particularly those outside established water service areas, depend on individual groundwater wells rather than centralized public systems. Water system planning and design standards are guided by the County's water system plans.

Wastewater/Sanitary Sewer

Wastewater service in the county is provided through municipal sanitary sewer systems, County-operated systems, and individual OSS for rural areas outside of service boundaries. Most cities operate their own sanitary sewer systems; except for Cosmopolis, which is served by the City of Aberdeen/Hoquiam system. Three cities (Elma, Montesano, and Westport) extend sewer service into the adjacent unincorporated county. The County operates sanitary sewer systems serving some unincorporated communities. The County-operated wastewater systems include the following:

- **Pacific Beach/Moclips Sanitary Sewer System** – Serves Pacific Beach, Moclips, Seabrook, Olympus Ocean Estates, Ocean Grove, and a U.S. Naval facility (CH2M HILL 2009). The system uses individual grinder pumps, seven pump stations, and a network of gravity and pressure mains that convey wastewater to the Pacific Wastewater Treatment Plant on Ocean Beach Road. The wastewater plan anticipates 2% annual growth from 2007 through 2029. As of December 2025, the system had 100 available sewer connections (Mittleider, pers. comm. 2026).
- **Illahee Oyehut Sanitary Sewer System** – The sewer system plan including existing and proposed facilities, growth assumptions and capacity are not available for this system.
- **Other small community wastewater treatment facilities** – Rural properties located outside of sewer service boundaries rely on private OSS. These systems require larger parcel sizes to function properly; therefore, areas served by OSS typically have lower development densities than areas within sanitary sewer service areas.

Solid Waste

The Grays Harbor County Transfer Station, located north of the Clemons Road – US 12 junction, is the primary disposal site for solid waste collected in the county. LeMay Enterprises, Inc. owns and operates the transfer station under an operations agreement with the County and provides collection services throughout most unincorporated areas.

The County's Solid and Hazardous Waste Management Plan (planning horizon of 2025) assumes growth consistent with Washington OFM medium population projection of 75,589 residents by the year 2040 (approximately 2.7% growth). Based on these assumptions, the plan indicates that the Grays Harbor County Transfer Station has sufficient capacity to accommodate future solid waste volumes over the 20-year planning period and has plenty of room to expand.

3.9.2 Potentially Significant Impacts

The proposed Comprehensive Plan itself would not result in direct changes to the physical and human environment. However, the plan provides a policy framework that is intended to guide future development and any impacts to the environment would be indirect. This section summarizes the impact analyses based on the amount of planned growth, and areas where growth will occur.

Methods of Analysis

Consistent with a planning-level approach, this analysis uses a qualitative methodology to assess potential changes in public services and utilities associated with implementation of the proposed Comprehensive Plan. This analysis evaluates whether projected growth patterns and associated activities could affect public services and utilities.

Impacts Common to All Alternatives

Proposed changes in land use classifications could influence future development, and those potential effects would apply to all alternatives.

Law Enforcement

The County has not adopted policies that establish minimum levels of service for law enforcement. The existing level of service is 1.9 deputies per 1,000 persons. Under all alternatives, population growth would result in increased demand for law enforcement services which may impact response times, investigative capacity, and patrol coverage. Rural areas with dispersed populations may be disproportionately impacted by response times and patrol coverage as it is difficult to maintain adequate coverage over long distances. Coastal areas where growth is expected are distant from the main County offices and facilities in Montesano and may require new or expanded facilities.

Fire and Emergency Medical Services

Growth in unincorporated areas could increase call volumes for fire suppression and EMS response. Under all alternatives, most growth would occur in the Brady, East Grays Harbor Fire Rescue, Pacific Beach, Copalis Beach and South Beach Regional Fire Authority fire districts. These districts may experience impacts from growth of housing, employment, and tourism.

Growth would also occur in districts with dispersed populations that may face pressure due to the high cost of maintaining adequate coverage across long distances. Agencies such as Fire District 17 (Humptulips) and Fire District 15 (North River) cover some of the most remote regions and could experience demand impacts.

Even with mitigation, unincorporated areas may continue to experience longer response times due to growth, geographic constraints, and sparse population patterns.

Parks and Recreation

Future growth in nearby communities may increase visitation to rural and coastal parks, particularly during peak tourism seasons. Increased use could accelerate wear on facilities,

increase parking demand, and require expanded maintenance or improvements at both County and state parks. Several unincorporated parks contain sensitive shoreline, dune, and estuarine habitats. Griffiths-Priday, Ocean City, and Pacific Beach State Parks contain critical habitat areas where increased recreational use may elevate erosion, vegetation disturbance, and wildlife impacts. Rural roads providing access to unincorporated parks may face congestion or higher maintenance needs.

Schools

As population grows, enrollment also grows and demand for educational facilities and services typically increases. Under all alternatives, most growth would occur within the school districts of North Beach, Hoquiam, Aberdeen, Montesano, Elma, and Ocosta. These school district plans may need to be updated to address changes to enrollment because of growth.

Electrical and Telecommunication Systems

Future land use changes may affect the electrical system by increasing electrical demand requiring substation expansion or grid reinforcement. Because all three alternatives include some level of development, each would contribute to increased demand on the electrical system and result in measurable impacts on overall system capacity and operations. Similarly, future land use changes may affect the demand for telecommunication infrastructure.

Water Supply Systems

Future land use changes may affect the water supply system by requiring higher water consumption and the need for source, storage, and distribution upgrades. Because all three alternatives include some level of development, each would contribute to increased demand on the water supply system and result in measurable impacts on overall system capacity and operations. Both County-operated water systems and city-operated water system serving unincorporated areas would be impacted by growth.

The forecast growth rate would exceed the 3.3% growth rate assumed in the Pacific Beach/Moclips Water System Plan (Gibbs and Olson 2016) and it is not clear whether there is adequate capacity to serve future development.

Forecast growth within the City of Elma water service area may exceed growth rates and capacity assumed in the City's water system plan.

Water plans would need to be updated to address growth. Growth-related system expansions of water mains and distribution lines in unincorporated areas would be needed to serve new development.

Wastewater/Sanitary Sewer

Future land use changes may affect the wastewater/sanitary sewer by increasing wastewater flows requiring treatment plant upgrades or expansions. Because all three alternatives include some level of development, each would contribute to increased demand on the wastewater/sanitary supply system and result in measurable impacts on overall system capacity and operations. Both County- and city-operated wastewater systems that serve unincorporated areas would be impacted by growth.

The forecast growth rate would exceed the 2% growth rate assumed in the Pacific Beach/Moclips Wastewater System Plan and it is not clear whether there is adequate capacity to serve future development.

Forecast growth rates may exceed the growth rates and capacity assumed in the Hogan's Corner Water and the Illahee Oyehut Sanitary Sewer System plans and they may not have sufficient capacity to serve future development.

Sewer plans would need to be updated to address growth. Growth-related system expansions such as extensions of sewer gravity, pressure mains, and pump stations in unincorporated areas would be needed to serve new development.

Solid Waste

Future land use changes may affect the solid waste system by creating additional solid waste generation demanding capacity planning. Because all three alternatives include some level of development, each would contribute to increased demand on the solid waste system and result in measurable impacts on overall system capacity and operations. There appears to be adequate capacity to maintain solid waste services (County 2021).

Alternative 1: No Action

Table 3.9-5 summarizes the No Action Alternative potential impacts. The No Action Alternative anticipates population growth of 5% county-wide, which is similar to past growth trends and likely anticipated by public service providers. Approximately 507 persons and 212 DUs would be forecast for the unincorporated county areas under this alternative.

Table 3.9-5. Alternative 1 Potential Impacts on Public Services and Utilities

Impact	Description
Law Enforcement	Because demands on law enforcement services generally increase as population grows, this alternative presents the lowest potential for increased pressure on law enforcement resources and operations. To maintain a level of service of 1.9 officers per 1,000 people, an additional 0.5 FTE officer would be needed.
Fire and Emergency Medical Services	Because demand for fire protection and EMS generally increases as population levels rise, this alternative presents the lowest potential for increased pressure on fire and EMS staffing, response capabilities, equipment needs, and overall service capacity.
Parks and Recreation	Because demand for parks, open space, and recreational facilities typically increases as the population grows, this alternative presents the lowest potential for additional pressure on existing park resources, maintenance needs, programming capacity, and recreational infrastructure.
Schools	This alternative would result in the least amount of population growth. This alternative presents the lowest potential for added pressure on school capacity, staffing needs, transportation services, and district resources in the affected districts.

Impact	Description
Electrical Systems/ Telecommunications	This alternative would result in the lowest level of overall development, including population growth, general development, and rural development. Because electrical and telecommunication system demands generally rise as development expands, this alternative would still result in additional load on electrical and telecommunication infrastructure, though at the lowest level compared to the other alternatives.
Water Supply Systems	This alternative would result in the lowest level of overall development, including population growth, general development, and rural development. Because water supply demands generally rise as development expands, this alternative would still result in additional demand on the water supply system, though at the lowest level compared to the other alternatives. Under this alternative, growth in unincorporated areas would be consistent with the growth assumptions contained in the water system plans for the cities of McCleary, Montesano, Ocean Shores, and Westport, indicating that there is likely adequate capacity for growth expected within the unincorporated portions of these water service areas.
Wastewater/Sanitary Sewer	This alternative would result in the lowest level of overall development, including population growth, general development, and rural development. Because wastewater generation typically increases as development expands, this alternative would still result in additional demand on the wastewater and sanitary sewer system, though at the lowest level compared to the other alternatives. Under this alternative, growth in unincorporated areas would be consistent with the growth assumptions contained in the water system plans for the cities of McCleary, Montesano, Ocean Shores, and Westport. Assuming that the city sewer system plans use the same growth rates, there may be adequate capacity for growth expected within the unincorporated portions of these sewer service areas.
Solid Waste	This alternative would result in the lowest level of overall development, including population growth, general development, and rural development. Because solid waste generation generally increases as development expands, this alternative would still result in additional demand on solid waste collection, transfer, and disposal services, though at the lowest level compared to the other alternatives.

Alternative 2: Moderate Growth

The Moderate Growth Alternative anticipates population growth of 10% county-wide, which is nearly twice the historic growth rate and is unlikely to be anticipated in the plans for public service providers. Approximately 3,522 persons and 1,474 DUs would be forecast for the unincorporated county areas under this alternative. Table 3.9-6 provides the potential impacts on public services and utilities for Alternative 2.

Table 3.9-6. Alternative 2 Potential Impacts on Public Services and Utilities

Impact	Description
Law Enforcement	Because demands on law enforcement services rise as the population increases, this alternative would create a moderately higher potential for additional pressure on law enforcement staffing, response capacity, and overall operations. To maintain a level of service of 1.9 officers per 1,000 people, an additional 3.5 FTE officers would be needed.
Fire and Emergency Medical Services	As population expands, the need for fire suppression, emergency medical response, and associated support services typically grows as well. Accordingly, this alternative would create a moderately higher potential for additional demand on fire and EMS resources, response times, and operational capacity.
Parks and Recreation	As population levels increase, so does the need for parks, trails, recreation programs, and maintenance services. Accordingly, this alternative would create a moderately higher potential for added demand on parks facilities, recreational programming, staffing, and overall service capacity.
Schools	As enrollment increases alongside population, schools may experience higher demand for classroom space, teachers, support staff, and program offerings. Accordingly, this alternative would create a potential for impacts on school capacity, educational programming, and operational resources. It is likely that school district capital facility plans for the affected districts would need to be updated to address the growth at rates higher than has occurred in the past.
Electrical Systems/ Telecommunications	Because electrical and telecommunication system demands generally rise as development expands, this alternative would result in additional load on electrical and telecommunication infrastructure at a moderate level, higher than Alternative 1 but lower than Alternative 3.
Water Supply Systems	This alternative would result in a moderate level of overall development, including population growth, general development, and rural development. Because water supply demands generally increase as development expands, this alternative would result in additional demand on the water supply system at a moderate level, greater than under Alternative 1 but still less than Alternative 3. Under this alternative growth in unincorporated areas exceed the growth assumptions contained in the water system plans for the cities of McCleary, Montesano, Ocean Shores, and Westport, indicating that there may not be adequate capacity for growth expected within the unincorporated portions of these water service areas.

Impact	Description
Wastewater/Sanitary Sewer	This alternative would result in a moderate level of overall development, including population growth, general development, and rural development. Because wastewater flows generally rise as development expands, this alternative would result in additional demand on the wastewater and sanitary sewer system at a moderate level, greater than under Alternative 1 but still less than what would occur under the Alternative 3. Under this alternative, growth in unincorporated areas are likely to exceed the growth assumptions contained in the sewer system plans for the cities of McCleary, Montesano, Ocean Shores, and Westport, indicating that there may not be adequate capacity for growth expected within the unincorporated portions of these sewer service areas.
Solid Waste	Because solid waste generation typically rises as development expands, this alternative would result in a moderate increase in demand on solid waste collection, transport, and disposal systems, greater than under Alternative 1 but still less than Alternative 3.

Alternative 3: High Growth

The High Growth Alternative anticipates population growth of 15% county-wide, which is nearly three times the historic growth rate and is unlikely to be anticipated in the plans for public service providers. Approximately 6,537 persons and 2,735 DUs would be forecast for the unincorporated county areas under this alternative. Table 3.9-7 provides the potential impacts on public services and utilities from Alternative 3.

Table 3.9-7. Alternative 3 Potential Impacts on Public Services and Utilities

Impact	Description
Law Enforcement	As population levels expand, the demand for law enforcement services typically grows at a similar or even accelerated pace. Accordingly, this alternative would pose the highest potential for increased workload, expanded resource needs, and operational impacts on law enforcement. To maintain the existing level of service of 1.9 officers per 1,000 people, an additional 6.5 FTE officers would be needed.
Fire and Emergency Medical Services	This alternative would result in the greatest amount of population growth. Higher population levels typically correspond to increased call volumes for fire protection, emergency medical response, and life safety services. As a result, this alternative would pose the highest potential for expanded workload, greater resource requirements, and significant operational impacts on fire service and EMS.

Impact	Description
Parks and Recreation	This alternative would result in the greatest amount of population growth. Higher population levels typically lead to significantly greater use of parks, trails, and recreational facilities. As a result, this alternative would pose the highest potential for increased wear on existing parks, greater need for new recreational amenities, expanded maintenance responsibilities, and broader operational impacts on the parks and recreation system.
Schools	Higher population levels typically generate the most substantial increases in student enrollment, which can place significant pressure on classroom capacity, staffing, transportation routes, and facility infrastructure. As a result, this alternative would pose the highest potential for operational impacts and the greatest need for expanded educational facilities and resources. It is likely that school district capital facilities plans for the affected districts would need to be updated to address the growth at rates that are significantly higher than have occurred in the past.
Electrical Systems/ Telecommunications	This alternative would result in the highest level of overall development, including population growth, general development, and rural development. Because electrical and telecommunication system demands generally rise as development expands, this alternative would result in the greatest additional load on electrical and telecommunication infrastructure, representing the highest increase among the three alternatives.
Water Supply Systems	This alternative would result in the highest level of overall development, including population growth, general development, and rural development. Because water supply demands generally rise as development expands, this alternative would result in the greatest increase in demand on the water supply system, representing the highest level of impact among the three alternatives. Under this alternative, growth in unincorporated areas may exceed the growth assumptions contained in the water system plans for the cities of McCleary, Montesano, Ocean Shores, and Westport, indicating that there may not be adequate capacity for growth expected within the unincorporated portions of these water service areas.

Impact	Description
Wastewater/Sanitary Sewer	Because sanitary sewer demand typically increases as development expands, this alternative would result in the greatest increase in wastewater flows and loading on the sanitary sewer system, representing the highest level of impact among the three alternatives. Under this alternative, growth in unincorporated areas may exceed the growth assumptions contained in the sewer system plans for the cities of McCleary, Montesano, Ocean Shores, and Westport, indicating that there may not be adequate capacity for growth expected within the unincorporated portions of these sewer service areas.
Solid Waste	This alternative would result in the highest level of overall development, including population growth, general development, and rural development. Because solid waste generation generally increases as development expands, this alternative would result in the greatest additional demand on solid waste services, representing the highest level of impact on collection capacity, hauling needs, and landfill or transfer station throughput among the three alternatives.

3.9.3 Avoidance, Minimization, and Mitigation

Incorporated Plan Features

The proposed Comprehensive Plan policies encourage growth and expansion in areas with existing or planned services and utilities.

Utilities and services to serve growth is coordinated among the County, city, public utility, and service providers.

Applicable Regulations and Commitments

County and state regulations require that new development has adequate water supply and wastewater disposal. If adequate capacity does not exist, development may be required to construct or fund system extensions or expansions.

Other Potential Mitigation Measures

Focusing growth in existing cities where services already exist could help maintain response times for law enforcement, fire service, and EMS.

In addition, to improve fire and emergency response time, a larger number of lower cost EMS stations could be constructed in lieu of providing full-service fire stations. By providing more of the EMS stations in more geographically dispersed locations, fire districts could serve a larger percentage of their incident calls at a lower cost.

Water and sewer providers could evaluate water and sewer system capacity, update plans, and construct system extensions and expansions to support additional growth.

School districts could work, in consultation with the County and cities, to identify transportation and facility needs in areas where higher amounts of growth are planned and update school capital facility plans.

Mitigation measures related to electric utilities may include:

- Conservation programs to reduce electric and water demand
- Infrastructure investment in underserved rural communities
- Coordination with BPA and regional partners for power reliability

Minimum levels of services could be established to ensure that services keep pace with growth.

3.9.4 Significant Unavoidable Adverse Impacts

As population and employment growth continues across all alternatives, the demand for public services and utilities will increase. With mitigation, including regular capital facilities planning, significant unavoidable adverse impacts could be reduced or eliminated.

4. References

American Association of State Highway and Transportation Officials (AASHTO). 2018. *A Policy on Geometric Design of Highways and Streets* (7th ed.).

Ames, K.M., and Herbert D.G. Maschner. 1999. *Peoples of the Northwest Coast: Their Archaeology and Prehistory*. Thames and Hudson Ltd. London.

Booth, D.B., K.G. Troost, J.J. Claque, and R.B. Waitt. 2005. The Cordilleran Ice Sheet. *Developments in Quaternary Science* 1:17-43.

CH2M HILL. 2009. Facility amendment III, Pacific/Moclips Area sewage collection system and wastewater treatment plan. January.

City of Montesano/Grays Harbor County Planning Department. 1979. *Montesano Area Comprehensive Plan*.

Davidson, Mike, 2001. The Railroads of Grays Harbor, 1880-1900.

<http://www.wagenweb.org/graysharbor/railroads/ghrr.html>.

Duncan, Don. 1990. "Logging Legacy – Hoquiam's Timber Families Span the History of the Lumber Industry in Washington." May 24. *Seattle Times*.

<https://archive.seattletimes.com/archive/19900524/1073661/logging-legacy---hoquiams-timber-families-span-the-history-of-the-lumber-industry-in-washington>.

Eaton, Rick, Public Works Director, City of Elma. 2026. Personal communication (email) with Erika Shook, Jacobs. March 2.

Franklin, J.F., and C.T. Dyrness. 1973. *Natural Vegetation of Oregon and Washington*. USDA Forest Service General Technical Report PNW-8. Washington, D.C.

Gibbs and Olson, Inc. 2016. Part B - Water System Plan Pacific Beach Water System.

Goings, Aaron. 2008. *Hoquiam – Thumbnail History*. Accessed February 2026.

<https://www.historylink.org/File/8652>.

Goings, Aaron. 2016. "Red Harbor: The IWW in Grays Harbor, Washington." *Radicals in the Community: Workers, Community, and Class Mobilizations in Grays Harbor, Washington, 1890-1940*. Civil Rights and Labor History Consortium, University of Washington.

https://depts.washington.edu/iww/red_harbor.shtml.

Gray and Osborne, Inc. 2020. City of McCleary Water system plan. Gray and Osborne, Inc. Consulting Engineers. November.

Gray and Osborne, Inc. 2025. City of Westport Water system plan update. September.

<https://cms8.revize.com/revize/westportwa/Water%20System%20Plan%20Update.pdf?t=202509291456400&t=202509291456400>.

Grays Harbor Council of Governments (GHCOG). 2026. State Fiscal Year 2026 *Unified Planning Work Program*. Aberdeen, Washington. <https://www.cwcog.org/wp-content/uploads/bsk-pdf-manager/2025/07/ADOPTED-2026-UPWP.pdf>.

Grays Harbor Council of Governments (GHCOG). n.d. Planning Documents.

<https://ghcog.org/index.php/planning-documents/>.

Grays Harbor Council of Governments (GHCOG), Quinault Indian Nation, and the Washington State Department of Transportation, Olympic Region. 2011. *Hidden Coast Scenic Byway Corridor Management Plan*. June. Aberdeen, Washington. <https://ghcog.org/wp-content/uploads/2026/02/Hidden-Coast-Final-83111-compressed-WEB.pdf>.

Grays Harbor County (County). 2018. Part B - Water system plan, Haven by the Sea Water System. December.

Grays Harbor County (County). 2021. Grays Harbor County Solid & Hazardous Waste Management Plan for Years 2020 to 2025. Amended July 6, 2021. <https://cms5.revize.com/revize/graysharborcounty/FINAL%20GHCo%20SWMP%2007-13-21.pdf?t=202308221704220&t=202308221704220>.

Grays Harbor County (County). 2023. *Grays Harbor County Shoreline Master Program*. Revised 2023. Montesano, Washington. https://www.graysharbor.us/government/planning_and_building/shoreline_master_program.php.

Grays Harbor County (County). 2024a. Consumer confidence report for Neilton Water System. Accessed March 2026. <https://cms5.revize.com/revize/graysharborcounty/Public%20Services/Utility%20and%20Facility/Consumer%20Confidence%20Reports/2024/CCR%20Report%202024%20WD8%20.pdf?t=202509210056030&t=202509210056030>.

Grays Harbor County (County). 2024b. *Grays Harbor County Hazard Mitigation Plan*.

Grays Harbor County (County). 2025. *Grays Harbor County Sewer System Design Standards*. October 2024 w/ Standard Detail Updates – June 2025. <https://cms5.revize.com/revize/graysharborcounty/Public%20Services/Utility%20and%20Facility/Specs/Sewer%20Specs.revised%2006.25.2025.pdf>.

Grays Harbor County (County). n.d. Shellfish Protection District (SPD). Accessed March 2026. https://www.graysharbor.us/departments/public_services/environmental_health_division/shellfish_protection_district.php.

Grays Harbor County Assessor. 2024. *Parcel and Land Use Data*. Montesano, Washington.

Grays Harbor County Board of Commissioners. 2009. *Damon Point Ordinances 381 and 383*.

Grays Harbor County Noxious Weed Control Board (GHCNWCB). 2025. *2025 Washington State Noxious Weed List: Grays Harbor Edition*. <https://wpcdn.web.wsu.edu/wp-extension/uploads/sites/2062/2025/03/2025-GH-Noxious-Weed-list-printable-pamphlet.pdf>.

Grays Harbor County Planning and Building Division. 2025. Issued permits for GIS mapping. August 29.

Grays Harbor County Planning Department. 1971. *Grays Harbor Planning Area*.

Grays Harbor County Planning Department. 1981. *Agricultural Element*.

Grays Harbor County Planning Department. 1983. *Grays Harbor Rural Lands Study*.

Grays Harbor County Planning Department. 1989. *County Industrial Lands Study*.

- Grays Harbor County Planning Department. 1999. *Lake Quinault Subarea Comprehensive Land Use Plan*.
- Grays Harbor County Planning Department. 2007. *Satsop Development Master Plan*.
- Grays Harbor County Water District No. 1. 2022. *2023 Water System Plan Update*. January 20.
- Grays Harbor Regional Planning Commission. 1981. *Regional Bike Plan for Grays Harbor*. September 24.
- Grays Harbor Transportation Authority (GHTA). 2025. *Transit Development Plan 2026–2031*.
- Gustafson, Carl E., and Clare Manis. 1984. *The Manis Mastodon Site: An Adventure in Prehistory*. Manis Enterprises, Sequim, Washington.
- Hajda, Yvonne P. 1990. "Southwestern Coast Salish." In *Northwest Coast*, ed. Wayne Suttles, pp. 503-517. Handbook of North American Indians, Vol. 7. Smithsonian Institution, Washington, D.C.
- Hayes, Derek. 1999. *Historical Atlas of the Pacific Northwest*. Sasquatch Books, Seattle, Washington.
- Institute of Education Sciences (IES). 2025. Search for Public Schools. National Center for Education Statistics. Accessed March 2026.
https://nces.ed.gov/ccd/schoolsearch/school_list.asp?Search=1&County=Grays%20Harbor%20County&State=53.
- Institute of Transportation Engineers (ITE). 2025. *Trip Generation Manual*. 12th Edition. August. Accessed March 2026. <https://www.ite.org/technical-resources/topics/trip-and-parking-generation-v2/trip-generation-info/>.
- Kopperl, R.E. (editor). 2016. *Results of Data Recovery at the Bear Creek Site (45KI839), King County, Washington*. Report on file at the Department of Archaeology and Historic Preservation. Olympia, Washington.
- Logan, Robert L. 2003a. Geologic Map of the Shelton 1:100,000 Quadrangle, Washington. Washington Division of Geology and Earth Resources Open File Report 2003-15.
- Logan, Robert L. 2003b. Geologic Map of the Copalis Beach 1:100,000 Quadrangle, Washington. Washington Division of Geology and Earth Resources Open File Report 2003-16.
- Margiotta, Richard, and Washburn, Scott. 2017. *Simplified Highway Capacity Calculation Method for the Highway Performance Monitoring System*. Report No. PL-18-003. Federal Highway Administration, Office of Policy and Governmental Affairs. October 15.
https://www.fhwa.dot.gov/policyinformation/pubs/pl18003/hpms_cap.pdf.
- Matson, R.G., and G. Coupland. 1995. *The Prehistory of the Northwest Coast*. Academic Press, London.
- McShane, Dan., 2011. Chehalis River, a Bit Different Than Other Western Washington Rivers. Washington Landscape Blogspot., Accessed February 2/12, /2025.
<https://washingtonlandscape.blogspot.com/2011/01/chehalis-river-bit-different-than-other.html#:~:text=As%20sea%20levels%20rose%20after,than%20other%20western%20Washington%20rivers>.

Miller, J. E. D., Wessel, S., & Fertig, W. 2024. *2024 Washington Vascular Plant Species of Conservation Concern*. Washington Department of Natural Resources, Natural Heritage Program. Natural Heritage Report 2024-07. https://dnr.wa.gov/sites/default/files/2025-03/amp_nh_vascular_ets.pdf.

Mittleider, Kaydee, Land Use Planner, Grays Harbor County Planning. 2026. Personal communication (meeting) with Erika Shook, Jacobs. January 22.

Moe, Rud Lamb. 2025. "The Geologic History of the Chehalis Forearc Basin, Washington State, USA." *Dissertations and Theses*. Paper 6892. <https://doi.org/10.15760/etd.3984>.

Montesano, City of (Montesano). 2022. City of Montesano Water System Plan Update. Executive summary. February. <https://cms8.revize.com/revize/montesano/Document%20Center/Public%20Works/February%202022%20-%20WSP%20Update%20-%20Exec%20Summary.pdf>.

National Academies of Sciences, Engineering, and Medicine. 2022. *Highway Capacity Manual 7th Edition: A Guide for Multimodal Mobility Analysis*. Washington, DC: The National Academies Press.

National Oceanic and Atmospheric Administration. n.d. EFH Mapper Report. Accessed November 2025. <https://www.habitat.noaa.gov/apps/efhmapper/efhreport/>.

National Park Service. 2025. *National Register of Historic Places (NRHP)*. Washington, D.C. Last updated: July 1, 2025. Accessed May 2026. <https://www.nps.gov/subjects/nationalregister/index.htm>.

Northwest Indian Fisheries Commission and Washington Department of Fish and Wildlife (NWIFC and WDFW). n.d. Statewide Washington Integrated Fish Distribution map. Accessed March 2026.

Office of Chehalis Basin. 2019. *ASRP Phase 1: Grays Harbor Tributaries Ecological Region*. https://www.graysharbor.us/departments/public_services/planning_division/planning_information/geological_hazards.php.

Olson, Ronald L. 1936. *The Quinault Indians*. University of Washington Publications in Anthropology 6(1):1-190.

Olson, Steve. 2025. "Logging, Lumbering, and Forestry in Southwest Washington." <https://www.historylink.org/File/23258>.

Olympic Region Clean Air Agency (ORCAA). n.d. Title V of the Federal Clean Air Act, Air Operating Permits (AOPs). Accessed March 12, 2026. <https://www.orcaa.org/for-business/air-operating-permits-aop/>.

Pace Engineers. 2016. City of Ocean Shores water system plan.

Phipps, J.B., Hemphill-Haley, E., and Atwater, B.F. 2015. Chance findings about early Holocene tidal marshes of Grays Harbor, Washington, in relation to rapidly rising seas and great subduction earthquakes (ver. 1.1, May 2016): U.S. Geological Survey Scientific Investigations Report 2015–5063. <http://dx.doi.org/10.3133/sir20155063>.

Ruby, Robert H., and John A. Brown. 1986. *A Guide to the Indian Tribes of the Pacific Northwest*. University of Oklahoma Press, Norman, Oklahoma.

- Smith, Marian W. 1940. *The Puyallup-Nisqually*. Columbia University Press. New York.
- Southwest Washington Regional Transportation Planning Organization (SWRTPO). 2025. *Regional Trails Plan*. Aberdeen, Washington. https://www.cwcog.org/wp-content/uploads/bsk-pdf-manager/2025/01/FINAL_RegionalTrailsPlan_PendingAdoption_rs-Stacey-Lane.pdf.
- Southwest Washington Regional Transportation Planning Organization (SWRTPO) and Grays Harbor Council of Governments (GHCOG). 2026. *Bay-2-Bay Corridor Management Plan*. Updated and Adopted January 2026. Aberdeen, Washington. https://www.evergreencoastwa.com/wp-content/uploads/2026/01/SR-105-CMP-Final_01_05_2026-compressed.pdf.
- U.S. Bureau of Labor Statistics. 2022. "Private, High-Level Industries, Grays Harbor County, Washington, 2025 Second Quarter, All establishment sizes." *Quarterly Census of Employment and Wages*. September. https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=5&year=2025&qtr=2&own=5&area=53027&supp=0.
- U.S. Bureau of Labor Statistics. n.d. Employment: Grays Harbor County, WA (U), LAUCN530270000000005 Not Seasonally Adjusted, Local Area Unemployment Statistics, Grays Harbor County, WA. Accessed June 5, 2025. [https://data.bls.gov/dataQuery/find?st=0&r=20&fq=mg:\[Measure+Category\]&fq=cg:\[Geography\]&fq=cc:\[Counties+and+Equivalents\]&more=0&fq=cdd:\[Washington\]](https://data.bls.gov/dataQuery/find?st=0&r=20&fq=mg:[Measure+Category]&fq=cg:[Geography]&fq=cc:[Counties+and+Equivalents]&more=0&fq=cdd:[Washington]).
- U.S. Census Bureau (Census). 2023. "Selected Housing Characteristics." *American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04*. <https://data.census.gov/table/ACSDP5Y2023.DP04>.
- U.S. Census Bureau (Census). 2024. "Commuting Characteristics by Sex." *American Community Survey, ACS 1-Year Estimates Subject Tables, Table S0801*. <https://data.census.gov/table/ACSST1Y2024.S0801?q=Commuting&q=050XX00US53027>.
- U.S. Census Bureau (Census). 2024 American Community Survey (ACS). Accessed February 2026. <https://www.census.gov/programs-surveys/acs.html>.
- U.S. Department of Agriculture (USDA). n.d. "Area of Interest Interactive Map." Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.
- U.S. Department of Agriculture, Natural Resources Conservation Service. n.d. *Soil Survey Geographic (SSURGO) Database for Grays Harbor County, Washington*. Washington, D.C. <https://websoilsurvey.sc.egov.usda.gov/>.
- U.S. Department of Housing and Urban Development (HUD). 2025a. Comprehensive Housing Affordability Strategy data. Accessed February 2026. https://www.huduser.gov/portal/datasets/cp.html#query_2006-2022.
- U.S. Department of Housing and Urban Development (HUD). 2025b. FY 2025 Income Limits Summary. Accessed February 2026. https://www.huduser.gov/portal/datasets/il/il2025/2025summary.odn?STATES=53.0&INPUTNAME=NCNTY53027N53027*5302799999%2BGrays+Harbor+County&statelist=&stname=Washington&wherefrom=&statefp=53&year=2025&ne_flag=&selection_type=county&incpath=&data=2025&SubmitButton=View+County+Calculations.

- U.S. Department of Housing and Urban Development (HUD). 2025c. Income Distribution Overview. HUD CHAS Data for Grays Harbor County Summary Level: County. Data for: Grays Harbor County; Washington. Year Selected: 2017-2021 ACS. Accessed August 2025. <https://www.huduser.gov/portal/datasets/cp.html>.
- US Crime Review. 2024. Washington – Grays Harbor County – Grays Harbor County Sheriff's Office. Data Year: 2024. Accessed March 2026. <https://uscrimereview.com/wa/agency/grays-harbor-county-sheriff>.
- U.S. Environmental Protection Agency (EPA). 2025. Level III and IV Ecoregions by State.
- U.S. Fish and Wildlife Service (USFWS). 2004. National Wetlands Inventory. Accessed February 2026. <https://doi.org/10.7944/USFWS.NWI>.
- U.S. Fish and Wildlife Service (USFWS). n.d.-a. Information for Planning and Consultation (IpaC). Accessed March 2026. <https://ipac.ecosphere.fws.gov/>.
- U.S. Fish and Wildlife Service (USFWS). n.d.-b. National Wetlands Inventory. Accessed March 2026. <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.
- USGS. 1995. Description of the Puget Sound Lowland. Open-File Report 95-470.
- U.S. Geological Survey (USGS). 2019. The StreamStats program. Accessed February 2026. <https://streamstats.usgs.gov/ss/>.
- U.S. Geological Survey (USGS). 2024. National Land Cover Database. Accessed May 2026. <https://www.usgs.gov/centers/eros/science/national-land-cover-database>.
- Wallace, Darrin. Sheriff, Grays Harbor Sheriff's Office. 2025. Potential cuts to the Grays Harbor County Sheriff's Office. The Daily World. Published November 7, 2025. Accessed March 2026. <https://www.thedailyworld.com/2025/11/07/potential-cuts-to-the-grays-harbor-county-sheriffs-office/>.
- Washington Center for Real Estate Research (WCRER). 2025. Washington State Housing Market Report, 3rd Quarter 2025. Accessed February 2026. <https://wcrer.be.uw.edu/wp-content/uploads/sites/60/2025/12/Washington-Housing-Market-Report-Q3-2025-Final.pdf>.
- Washington Department of Fish and Wildlife (WDFW). 2009. *Landscape planning for Washington's wildlife: Managing for biodiversity in developing areas*. Olympia, WA.
- Washington Department of Fish and Wildlife (WDFW). 2023. *Priority Habitats and Species List*. Revised June 2023.
- Washington Department of Fish and Wildlife (WDFW). 2026a. Johns River Wildlife Area Unit. <https://wdfw.wa.gov/places-to-go/wildlife-areas/johns-river-wildlife-area-unit>.
- Washington Department of Fish and Wildlife (WDFW). 2026b. Priority Habitats and Species Map. <https://wdfw.wa.gov/conservation/phs/>.
- Washington Spatial Data. 2025. WSDOT - Level of Service Standards for State Routes. Published 2014, updated October 7, 2025.
- Washington Spatial Data. n.d. WA Soils, OpenData WADNR. Accessed February 13, 2026. <https://geo.wa.gov/datasets/wadnr::wa-soils/about>.

- Washington State Department of Archaeology and Historic Preservation (DAHP). n.d.-a. *Washington Heritage Register*. Olympia, Washington. Accessed May 2026. <https://dahp.wa.gov/historic-registers/washington-heritage-register>.
- Washington State Department of Archaeology and Historic Preservation (DAHP). n.d.-b. *Washington Heritage Barn Register*. Olympia, Washington. Accessed May 2026. <https://dahp.wa.gov/historic-registers/heritage-barn-register>.
- Washington State Department of Ecology (Ecology). 2000. Grays Harbor Watershed Cleanup Planning (Focus Report). Accessed March 2026. <https://apps.ecology.wa.gov/publications/publications/0010050.pdf>.
- Washington State Department of Ecology (Ecology). 2017. Grays Harbor Resilience Coalition Project Report. Publication number 17-06-018. June. <https://apps.ecology.wa.gov/publications/documents/1706018.pdf>.
- Washington State Department of Ecology (Ecology). 2019. *Stormwater Management Manual for Western Washington*. July.
- Washington State Department of Ecology (Ecology). 2023. *Washington State Wetland Program Plan: 2023 Update* (Publication 23). https://library.municode.com/wa/grays_harbor_county/codes/code_of_ordinances?nodeId=TIT18EN_CH18.06CRARPROR_ARTIIIWE_18.06.380WEBU.
- Washington State Department of Ecology (Ecology). 2024. Aquatic Species Restoration Plan – Estuary Ecological Region Supplement.
- Washington State Department of Ecology (Ecology). n.d.-a. Air Operating Permit Register. Accessed March 12, 2026. https://fortress.wa.gov/ecy/ezshare/AQ/AOP/permit_register/register.htm.
- Washington State Department of Ecology (Ecology). n.d.-b. *Wetlands* (overview; tools & resources). https://www.graysharbor.us/departments/public_services/planning_division/planning_information/critical_aquifer_recharge_areas_%28cara%29.php. [graysharbo...a.elaws.us]
- Washington State Department of Ecology (Ecology). n.d.-c. GIS Data. Accessed March 2026. <https://ecology.wa.gov/research-data/data-resources/geographic-information-systems-gis/data>.
- Washington State Department of Ecology (Ecology). n.d.-d. *Washington Coastal Atlas*. Shoreline slope stability data.
- Washington State Department of Ecology (Ecology). n.d.-e. *Water Quality Assessment (303(d) and Category 5) Database*. Olympia, Washington.
- Washington State Department of Health (DOH). n.d. Shellfish Beach Closures. Accessed March 2026. <https://doh.wa.gov/community-and-environment/shellfish/beach-closures>.
- Washington State Department of Health (DOH). 2025-a. Shellfish Harvest Areas See Water Quality Gains, Yet New Restrictions Hit Four Locations. <https://doh.wa.gov/newsroom/shellfish-harvest-areas-see-water-quality-gains-yet-new-restrictions-hit-four-locations>.

Washington State Department of Health (DOH). 2025-b. Grays Harbor Annual Shellfish Growing Area Review, 2024. <https://doh.wa.gov/sites/default/files/2025-08/grays.pdf>.

Washington State Department of Natural Resources (DNR). n.d.-a. *Willapa Hills*.

Washington State Department of Natural Resources (DNR). n.d.-b. Chehalis River Surge Plain Natural Area Preserve. Accessed March 2026. <https://dnr.wa.gov/natural-areas/natural-area-preserves/chehalis-river-surge-plain-natural-area-preserve>.

Washington State Department of Natural Resources (DNR). n.d.-c. Elk River Natural Resources Conservation Area. Accessed March 2026. <https://dnr.wa.gov/natural-areas/natural-resources-conservation-areas/elk-river-natural-resources-conservation-area>.

Washington State Department of Natural Resources (DNR). n.d.-d. North Bay Natural Area Preserve. Accessed March 2026. <https://dnr.wa.gov/natural-areas/natural-area-preserves/north-bay-natural-area-preserve>.

Washington State Department of Natural Resources (DNR). n.d.-e. Washington Geological Survey. *Liquefaction Susceptibility Mapping for Grays Harbor County*. Olympia, Washington. Accessed May 2026. <https://dnr.wa.gov/washington-geological-survey>.

Washington State Department of Transportation (WSDOT). 2023. Transit Development Plan Guidebook (M 3137). Public Transportation Division. March.

Washington State Department of Transportation (WSDOT). 2024. *2024 Highway System Plan*. Accessed May 2026. <https://wsdot.wa.gov/construction-planning/statewide-plans/highway-system-plan>.

Washington State Noxious Weed Control Board (WSNWCB). n.d. The 3 Classes of Noxious Weeds. Accessed November 2025. <https://www.nwcb.wa.gov/classes-of-noxious-weeds>.

Washington State Office of Financial Management (OFM). 2024. *Intercensal and Postcensal Population Estimates for Washington State and Counties: 2024*. Olympia, Washington. Accessed May 2026. <https://ofm.wa.gov/washington-data-research/population-demographics/population-estimates>.

Washington State Office of Financial Management (OFM). 2025a. *Postcensal Estimates of April 1 Housing Units, 1980, 1990 to Present*. June 27.

Washington State Office of Financial Management (OFM). 2025b. *Postcensal Estimates of April 1 Population, 1960 to Present*. June 28.

Washington State Office of Financial Management (OFM). 2025c. April 1, 2025 Population of Cities, Towns and Counties Used for Allocation of Selected State Revenues. March 2026.

Wegmann, K.W., D.R. OneSteel, J.D. Bowman, J.A. Homburg, J.D. Windingstad, and D. Beery, 2012. Assessing Coastal Landscape Change for Archaeological Purposes: Integrating Shallow Geophysics, Historical Archives and Geomorphology at Port Angeles, Washington, USA. *Archaeological Prospection* 19(4):229–252.

Wilma, David. 2006. Grays Harbor County – Thumbnail History. <https://www.historylink.org/file/7766>.

Wingard, Noah. 2022. "Labor, Logging, Life and Death in Grays Harbor." October 28.
<https://industrialworker.org/labor-logging-life-and-death-in-grays-harbor/>.

5. Distribution List

Notice of Availability of the Draft Environmental Impact Statement for the Grays Harbor County 2027 Comprehensive Land Use Plan was distributed to agencies, tribes, jurisdictions, special purpose districts, and interested parties, including but not limited to the following:

Federal Agencies

- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. Geological Survey

State Agencies

- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife
- Washington State Department of Natural Resources
- Washington State Department of Health
- Washington State Department of Transportation – Olympic Region
- Washington Department of Archaeology and Historic Preservation
- Washington State Department of Commerce
- Olympic Region Clean Air Agency

Tribal Governments

- Confederated Tribes of the Chehalis Reservation
- Quinault Indian Nation
- Other affected and interested tribal governments

Local Governments and Public Agencies

- Grays Harbor County Board of County Commissioners
- Cities of Aberdeen, Cosmopolis, Elma, Hoquiam, McCleary, Montesano, Oakville, Ocean Shores, and Westport
- Port of Grays Harbor (including Satsop Business Park)
- Grays Harbor Public Utility District
- Grays Harbor Transportation Authority
- Grays Harbor Conservation District
- Grays Harbor Water Districts
- Fire Districts and Regional Fire Authorities within Grays Harbor County

School Districts

- Aberdeen, Cosmopolis, Elma, Hoquiam, Lake Quinault, Mary M. Knight, McCleary, Montesano, North Beach, North River, Oakville, Ocosta, Rochester, Satsop, Taholah, and Wishkah Valley School Districts

Other Interested Parties

- Chehalis Basin Fisheries Task Force
- Chehalis River Basin Land Trust
- Forterra
- Friends of Grays Harbor
- Futurewise
- The Nature Conservancy
- Twin Harbors Waterkeeper
- Volunteer Stewardship Program representatives
- Individuals requesting notice

Appendix A

Earth

Table A-1 summarizes the federal, state, and local regulations related to the protection of fish, wildlife, vegetation, and habitat.

Table A-1. Fish, Wildlife, Vegetation, and Habitat Regulatory Setting Summary

Regulation	Agency	Description
<i>Federal</i>		
ESA, 1973, 16 USC 703-712, as amended	USFWS and NOAA Fisheries	Provides for the conservation of threatened and endangered species and their habitats. Prohibits actions that harm listed species or their critical habitats.
Fish and Wildlife Coordination Act, 1934, 16 USC 661-666c	USFWS and NOAA Fisheries	Requires federal agencies to consult with USFWS and NMFS before undertaking projects that modify water bodies, ensuring wildlife conservation is considered in water resource development.
Migratory Bird Treaty Act, 1918, 16 USC 703-712, as amended	USFWS	Implements international treaties to protect migratory birds. Prohibits taking, killing, or possessing migratory birds without a permit.
Bald and Golden Eagle Protection Act, 1940, 16 USC 668-668d, as amended	USFWS	Prohibits the take, possession, sale, or transport of bald and golden eagles, including their parts, nests, or eggs, without a permit.
Marine Mammal Protection Act, 1972, 16 USC 1361-1423h, as amended	USFWS and NOAA Fisheries	Prohibits the take and harassment of marine mammals in U.S. waters.
Marine Protection, Research, and Sanctuaries Act, 1972, 33 USC 1401-1445; 16 USC 1431-1447f	EPA and NOAA Fisheries	Regulates ocean dumping and establishes marine sanctuaries to protect sensitive ecosystems and prevent harm to human health and marine environments.
National Invasive Species Council, Executive Order 13112 (1999), amended by Executive Order 13751 (2016)	Executive Office of the President	The National Invasive Species Council coordinates federal efforts to address invasive species through policy development, interagency coordination, and strategic planning.
Safeguarding the Nation from the Impacts of Invasive Species, 2016, Executive Order 13751	National Invasive Species Council	Directs federal agencies to prevent, control, and eradicate invasive species to minimize their ecological, economic, and health impacts.
Rivers and Harbors Act Section 10, 1899, 33 USC 403	USACE and EPA	Section 10 regulates construction and dredging in navigable waters.
Clean Water Act Section 404, 1972, 33 USC 1344	EPA	Section 404 of the Clean Water Act regulates the discharge of dredged or fill materials into waters of the U.S.
Magnuson-Stevens Fishery Conservation and Management Act and Sustainable Fisheries Act, 1976, 16 USC 1801-1882;	NMFS	Governs marine fisheries in federal waters, aiming to prevent overfishing, rebuild stocks, and protect essential fish habitats through regional fishery management councils.

Regulation	Agency	Description
Sustainable Fisheries Act, 1996 (amendment)		
National Environmental Policy Act, 1969, 42 USC 4321-4370h, as amended	CEQ	Requires federal agencies to assess the environmental effects of their proposed actions before making decisions.
State		
Hydraulic Code, 1949, RCW 77.55	WDFW	Requires a Hydraulic Project Approval for the construction of projects in, near, and/or over state waters to ensure protection of aquatic species and habitat.
Coastal Zone Management Consistency	Ecology	Ensures that federal actions affecting the State of Washington's coastal counties are consistent with the state's policies under the federally approved Coastal Zone Management Program.
Hydraulic Code, 1949, RCW 77.55	WDFW	Requires a Hydraulic Project Approval for the construction of projects in, near, and/or over state waters to ensure protection of aquatic species and habitat.
Grays Harbor County Municipal Code, Title 16 Subdivisions	Ecology and County	GHCC Title 16 requires that all applicable site plans comply with the drainage and stormwater standards outlined in the current edition of Ecology's SWMMWW.
Local		
Grays Harbor County Municipal Code, Chapter 18.06 Critical Areas Protection Ordinance	County	Identifies and protects the value and function of critical areas (i.e., wetlands, critical aquifer recharge areas, frequently flooded areas [refer to Figure 3.3-3, FEMA Flood Hazard Areas for greater detail], geologically hazardous areas, and fish and wildlife habitat conservation areas, and trees within these areas) while allowing for the reasonable use of private and public property in accordance with the GMA.
Grays Harbor County Municipal Code, Chapter 18.10 Natural Resource Lands	County	Classifies and designates resource lands of long-term commercial significance in accordance with RCW 36.70A.170 and RCW 36.70A.130.
Grays Harbor County Municipal Code, Title 14 Forest Practices	County	Implements the provisions of the Washington State Forest Practices Act (RCW 76.09.060(3) (b)(i)(E), as amended) to ensure that conversions of forest land (refer to Figure 3.5-2, 2024 Land Use Cover for greater detail) are consistent with County development regulations, and to protect public resources.
Grays Harbor County Municipal Code, Chapter 18.20 North	County	The purpose of the North Beach Shellfish Protection District is to address water quality concerns along the Pacific Coast Growing

Regulation	Agency	Description
Beach Shellfish Protection District		Area and to develop long-term strategies to prevent further commercial shellfish growing area downgrades and restore commercial shellfish growing areas.
Grays Harbor County SMP, 2023	County	Implements the policies of the Shoreline Management Act under Chapter 90.58 RCW to promote the health, safety, and general welfare of the citizens of the County.
Grays Harbor County Municipal Code, Title 16 Subdivisions (Stormwater and Landscaping)	County and Ecology	GHCC Title 16 requires that all applicable site plans comply with the drainage and stormwater standards outlined in the current edition of Ecology's <i>Stormwater Management Manual for Western Washington</i> and outlines landscaping requirements for different types of development.
Grays Harbor County Municipal Code, Title 16	County	GHCC Title 16 describes landscaping requirements for various types of development.
Grays Harbor County Comprehensive Plan, Natural Environment Chapter	County	The Resource Lands and Critical Areas Element of the County's comprehensive plan outlines goals and policies focused on conservation of resource land and critical areas.
Project-level SEPA review, 1971, RCW 43.21C	County	Requires that the County acts as the lead agency under SEPA, overseeing the environmental review process and determining whether a project has significant environmental impacts.

CEQ = U.S. Council on Environmental Quality

ESA = Endangered Species Act

NMFS = National Marine Fisheries Service

NOAA = National Oceanic and Atmospheric Administration

USC = *United States Code*

USACE = U.S. Army Corps of Engineers

USFWS = U.S. Fish and Wildlife Service

WDFW = Washington Department of Fish and Wildlife

Protected fish and aquatic species identified as priority species by WDFW and federal agencies are summarized in Table A-2, including their ESA status and the presence of designated critical habitat or NOAA fisheries essential fish habitat (EFH) within Grays Harbor County.

Table A-2. Protected/WDFW Priority Aquatic Species Documented in Grays Harbor County

Common Name	Scientific Name	Federal Status	State Status	Designated Critical Habitat and/or EFH within the County
Anadromous Salmonids				
Chinook	<i>Oncorhynchus tshawytscha</i>	T	C	Yes
Steelhead – Puget Sound DPS	<i>O. mykiss</i>	T	N/A	Yes (EFH)
Chum	<i>O. keta</i> (Hood Canal summer ESU)	T	N/A	
Coho	<i>O. kisutch</i>	T	N/A	Yes (EFH)
Pink	<i>O. gorbuscha</i>	N/A	N/A	Yes (EFH)
Sockeye	<i>O. nerka</i>	T (Ozette Lake) E (Snake River)	N/A	Yes (EFH)
Bull Trout	<i>Salvelinus confluentus</i>	T	C	Yes (CH)
Coastal cutthroat	<i>O. clarkii clarkii</i>	N/A	N/A	Yes (EFH)
Forage Fish				
Surf smelt	<i>Hypomesus pretiosus</i>	N/A	P/SGCN	Yes (EFH)
Pacific sand lance	<i>Ammodytes hexapterus</i>	N/A	P	Yes (EFH)
Pacific herring	<i>Clupea pallasii</i>	N/A	N/A	Yes (EFH)
Longfin smelt	<i>Spirinchus thaleichthys</i>	N/A	N/A	Yes (EFH)
Eulachon	<i>Thaleichthys pacificus</i>	T (Southern DPS)	N/A	Yes (CH)
Freshwater				
Pacific lamprey	<i>Entosphenus tridentatus</i>	N/A	P	N/A
River lamprey	<i>Lampetra ayresii</i>	N/A	C	N/A
Olympic mudminnow	<i>Novumbra hubbsi</i>	N/A	S	N/A
Marine (excluding forage fish)				
Green Sturgeon	<i>Acipenser medirostris</i>	T	N/A	Yes (CH)

Common Name	Scientific Name	Federal Status	State Status	Designated Critical Habitat and/or EFH within the County
(Southern DPS)				
White Sturgeon	<i>Acipenser transmontanus</i>	N/A	N/A (SGCN only statewide)	N/A
Pacific Cod	<i>Gadus macrocephalus</i>	N/A	N/A	Yes (EFH)
Pacific Hake (Whiting)	<i>Merluccius productus</i>	N/A	N/A	Yes (EFH)
Walleye Pollock	<i>Gadus chalcogrammus</i>	N/A	N/A	Yes (EFH)
Black Rockfish	<i>Sebastes melanops</i>	N/A	N/A	Yes (EFH)
Brown Rockfish	<i>Sebastes auriculatus</i>	N/A	N/A	Yes (EFH)
Canary Rockfish	<i>Sebastes pinniger</i>	N/A (Puget Sound DPS delisted in 2017; coastal populations not ESA-listed)	N/A	Yes (EFH)
Greenstriped Rockfish	<i>Sebastes elongatus</i>	N/A	N/A	Yes (EFH)
Quillback Rockfish	<i>Sebastes maliger</i>	N/A	N/A	Yes (EFH)
Redstripe Rockfish	<i>Sebastes proriger</i>	N/A	N/A	Yes (EFH)
Tiger Rockfish	<i>Sebastes nigrocinctus</i>	N/A	N/A	Yes (EFH)
Widow Rockfish	<i>Sebastes entomelas</i>	N/A	N/A	Yes (EFH)
Yelloweye Rockfish	<i>Sebastes ruberrimus</i>	T (Threatened Puget Sound/Georgia Basin DPS)	N/A	Yes (EFH)
Yellowtail Rockfish	<i>Sebastes flavidus</i>	N/A	N/A	Yes (EFH)
Lingcod	<i>Ophiodon elongatus</i>	N/A	N/A	Yes (EFH)
Rock Sole (Southern Rock Sole)	<i>Lepidopsetta bilineata</i>	N/A	N/A	Yes (EFH)
Shellfish				
Butter clam	<i>Saxidomus gigantea</i>	N/A	N/A	N/A

Common Name	Scientific Name	Federal Status	State Status	Designated Critical Habitat and/or EFH within the County
Native littleneck clam	<i>Leukoma staminea</i>	N/A	N/A	N/A
Manila (Japanese) littleneck clam	<i>Ruditapes philippinarum</i>	N/A	N/A	N/A
Olympia Oyster	<i>Ostrea lurida</i>	N/A	N/A	N/A
Pacific Oyster	<i>Crassostrea gigas</i>	N/A	N/A	N/A
Pacific Razor Clam	<i>Siliqua patula</i>	N/A	N/A	N/A
Dungeness Crab	<i>Metacarcinus magister</i>	N/A	N/A	N/A
Pandalid Shrimp	Family <i>Pandalidae</i>	N/A	N/A	N/A
Red Sea Urchin	<i>Mesocentrotus franciscanus</i>	N/A	N/A	N/A

C = candidate

CH = critical habitat

DPS = Distinct Population Segment

E = endangered

N/A = not applicable

P = priority species

S = sensitive

SGCN = Species of Greatest Conservation Need

T = Threatened

Table A-3 summarizes the County Noxious Weed Control Board's defined Class A Weeds, for which eradication is required (GHCNWCB 2025).

Table A-3. Grays Harbor County Class A Noxious Weeds

Common Name	Scientific Name
Common crupina	<i>Crupina vulgaris</i>
Cordgrass, common	<i>Spartina anglica</i>
Cordgrass, dense-flowered	<i>Spartina densiflora</i>
Cordgrass, saltmeadow	<i>Spartina patens</i>
Dyer's woad	<i>Isatis tinctoria</i>
Eggleaf spurge	<i>Euphorbia oblongata</i>
False brome	<i>Brachypodium sylvaticum</i>
Floating primrose-willow	<i>Ludwigia peploides</i>
Flowering rush	<i>Butomus umbellatus</i>
French broom	<i>Genista monspessulana</i>
Garlic mustard	<i>Alliaria petiolata</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>
Goatsrue	<i>Galega officinalis</i>
Hydrilla	<i>Hydrilla verticillata</i>
Johnsongrass	<i>Sorghum halepense</i>
Knapweed, bighead	<i>Centaurea macrocephala</i>
Knapweed, Vochin	<i>Centaurea nigrescens</i>
Kudzu	<i>Pueraria montana</i> var. <i>lobata</i>
Meadow clary	<i>Salvia pratensis</i>
Oriental clematis	<i>Clematis orientalis</i>
Palmer amaranth	<i>Amaranthus palmeri</i>
Purple starthistle	<i>Centaurea calcitrapa</i>
Reed sweetgrass	<i>Glyceria maxima</i>
Ricefield bulrush	<i>Schoenoplectus mucronatus</i>
Round leaf bittersweet	<i>Celastrus orbiculatus</i>
Sage, clary	<i>Salvia sclarea</i>
Sage, Mediterranean	<i>Salvia aethiopis</i>
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>
Small-flowered jewelweed	<i>Impatiens parviflora</i>
South American spongeplant	<i>Limnobium laevigatum</i>
Spanish broom	<i>Spartium junceum</i>

Common Name	Scientific Name
Syrian beancaper	<i>Zygophyllum fabago</i>
Texas blueweed	<i>Helianthus ciliaris</i>
Thistle, Italian	<i>Carduus pycnocephalus</i>
Thistle, marsh	<i>Cirsium palustre</i>
Thistle, milk	<i>Silybum marianum</i>
Thistle, slenderflower	<i>Carduus tenuiflorus</i>
Thistle, Turkish	<i>Carduus cinereus</i>
Variable-leaf milfoil and hybrid	<i>Myriophyllum heterophyllum</i> and <i>M. heterophyllum</i> x <i>M. hippuroides</i>
Wild four-o'clock	<i>Mirabilis nyctaginea</i>

Appendix B

Plants and Animals

Table B-1. Planned Projects and Estimated Expenditures for Grays Harbor County (2026 Annual Construction Program)

Project Name and Location	Category	2026 Estimated Expenditure
Garrard Creek Bridge Replacement	Bridge	250,000
East Hoquiam River Bridge Replacement	Bridge	250,000
Humtulpis Overflow Bridge Replacement	Bridge	300,000
Cranberry Road Drainage Bridge - Pier 1 Repair	Bridge	160,000
Copalis River Bridge Column Repairs	Bridge	110,000
Wynooche River Slough	Bridge	160,000
Ocean Beach Road Realignment	Road Project	50,000
Wynooche Culvert Replacement	Culvert	60,000
Wishkah Culvert Replacement	Culvert	70,000
Mopang Creek at Walker Road Fish Passage	Culvert	100,000
Chenois Creek at Chenois Valley Road Fish Passage	Culvert	110,000
Damon Creek at Kirkpatrick Road	Culvert	123,260
East Satsop Slide Repair (Emergency)	Other	80,000
Elk Creek/SR 109 Flood Hazard Reduction Project	Other	200,000
Minor Projects and Contingencies	Unclassified/ Countywide	55,000

Table B-2 illustrates the complete list of projects planned in the study area for the upcoming five years as per WSDOT's Transportation Improvement Plan (TIP) 2026 – 2031, along with the project description and the total funding.

Table B-2. List of WSDOT Projects (2026 – 2031 TIP) Planned in the Unincorporated County Area

Project Name	Project Description	Total Funding (Federal + State + Local)
Grays Harbor County - Bundled Timber Repair Project	The bundled bridge repair project would repair timber elements in Condition State 3 & 4 for 13 bridges, and up to 17 bridges. The repairs are mainly for timber pile caps and timber piles that have significant decay and section loss but also include a couple timber stringer repairs and a timber abutment repair.	2,800,000
Sickman Ford Bridge Repair Project	The project would consist of the following repairs to the main span steel deck truss: strengthening members that lack capacity, repairing corroded members, and cleaning and painting of the full truss system.	3,150,000
Karjala Road Improvement Project	The project would reconstruct Karjala Road and install new pedestrian facilities.	1,880,000
Damon Road Pedestrian Improvements	The project would design and construct a shared use path along Damon Road to provide beach access and connect with existing City of Ocean Shores trail.	1,300,000
Berryman Creek Fish Passage Project	The project would replace a fish passage barrier culvert under a County road crossing by designing and permitting the culvert's removal and proceeding to final design of its replacement with a fully passable stream crossing structure.	2,700,000
Chenois Creek Fish Passage Project	The project would remove two steel culverts installed under a single road crossing and replace them with a fully passable structure, benefiting five anadromous fish species. The project would reconnect the creek with its floodplain.	951,762
Cranberry Road Drainage Bridge Replacement	The project would replace existing timber/concrete structure with concrete structure.	1,520,750
East Hoquiam River Bridge Replacement	The project would replace the existing three-span structure with a single-span prestressed concrete bridge.	2,833,500
Garrard Creek Bridge Replacement	The project would replace Garrard Creek Bridge on Brooklyn Road.	1,799,500
Humtulpis Overflow Bridge (1)	The project would replace Humtulpis Overflow Bridge.	3,516,000
Mopang Creek Fish Passage Project	The project would replace existing culvert with new structure designed to current fish passage standards.	1,170,000

Project Name	Project Description	Total Funding (Federal + State + Local)
Ocean Beach Road Realignment	The project would reconstruct the road to eliminate two substandard curves.	3,050,000
Polson Creek Fish Passage Project	The project would design and remove a fish passage barrier culvert, replacing it with a structure that is fully passable to all aquatic species.	2,600,000
Workman Creek Fish Passage Project	The project would design, permit, and implement the removal of two fish passage barrier culverts installed under a single road crossing and their replacement with a structure that is fully passable to all aquatic species.	2,900,000
Wishkah Road Culvert Replacement	The project would replace undersized culvert and raise Wishkah Road to reduce flooding.	575,000
Wynooche Road Culvert Replacement	The project would replace an undersized culvert.	750,000
Wildcat Creek Bridge #1 Replacement	The project would replace existing structure with a new concrete structure designed to current standards.	3,242,000
Wildcat Creek Bridge #2 Replacement	The project would replace Wildcat Creek Bridge.	2,990,000
Delezenne Creek Bridge (1) Replacement	The project would replace the existing three-span structure with a single-span prestressed concrete bridge.	2,600,000
Garrard Creek Bridge Replacement	The project would replace the existing structure with a new concrete structure built to current standards.	3,262,000
Vesta School Bridge Replacement Project	The project would replace the existing structure with a new concrete structure designed to current standards.	9,060,000
Wynooche River Slough (2) Bridge Replacement Project	The project would replace the existing structure with a new concrete structure designed to current standards.	3,190,000
Middle Satsop Road Curve Revision	The project would realign the road curve.	2,510,000
Clemons Road North Reconstruction	The project would reconstruct a portion of Clemmons Road added to County road inventory. The road would be upgraded to meet current standards. Once complete, the project will allow the closure of the W. Wynooche Road intersection with SR 12.	2,000,000
Wynooche Valley Road Chip Seal Project	The project would apply pavement preservation treatment to seal the surface and extend pavement life.	1,350,000
Grays Harbor County 2026 Cities and County Paving Project	The project would pave various projects throughout Grays Harbor County. Sponsors will work off a selected list as much as funding will allow.	1,000,000

Project Name	Project Description	Total Funding (Federal + State + Local)
Major Collector Roads Bituminous Surface Treatments	The project would pave existing gravel roads.	80,000
Access Road Bituminous Surface Treatments	The project would pave existing gravel roads.	90,000
Intersection Improvements - Montesano Street / Chehalis Street	The project would construct a left turn lane.	550,000

Table B-2. Transportation Infrastructure and Roadway Recommendations for Unincorporated County

Topic	No Action Alternative (5% Growth)	Moderate Growth Alternative (10% Growth)	High Growth Alternative (15% Growth)
Roadway Preservation and Capacity	Maintain existing preservation schedule; prioritize resurfacing on rural arterials experiencing early increases in vehicle miles traveled.	Increase preservation funding; implement targeted operational improvements (for example, turn lanes, shoulder widening) at village mixed-use and commercial access points.	Develop phased capacity improvements on major corridors; consider corridor-level widening, access management, and long-term structural upgrades.
Safety Enhancements	Expand low-cost safety countermeasures (for example, rumble strips, delineation, guardrails) on high-speed rural roads.	Address emerging congestion-related safety issues at key intersections; improve freight turning radii near industrial sites.	Implement comprehensive safety upgrades on major County roadways; integrate climate-resilient design for flood-prone segments.
Transit Service and Demand-Response	Maintain and optimize existing GHT routes; enhance demand-response scheduling efficiency.	Expand demand-response coverage and service hours; evaluate new circulators in village mixed-use areas.	Plan for long-term transit expansion, including microtransit pilots, increased frequency, and additional fleet needs.
Active Transportation	Fill critical sidewalk and shoulder gaps near schools and community centers.	Implement priority multimodal corridors in growing residential and mixed-use areas; improve crossings.	Develop a Countywide active transportation network; construct shared-use paths and continuous shoulders along major roadways.
Land Use Coordination and Access Management	Adopt minimum LOS standards; apply existing access management policies to new residential and commercial driveways.	Strengthen access spacing requirements along major County roads; encourage clustered development in village mixed-use areas.	Require transportation impact analyses for large commercial/industrial projects; implement corridor-wide access management strategies.
Long-Range Planning and Funding	Update the TIP to reflect baseline growth.	Pursue state and federal funding for safety and multimodal improvements; refine scenario-based capital planning.	Develop a long-range capital strategy for major roadway upgrades, resilience projects, and multimodal expansion.

Table B-3 below summarizes the different mitigation options and recommendations, focusing on the aspects of roadway preservation and capacity, safety enhancements, transit service and demand-response, active transportation, land-use coordination and access management, and long-range planning and funding, among others.

Table B-3. Transportation Infrastructure and Roadway Recommendations for Grays Harbor County

Topic	No Action Alternative (5% Growth)	Moderate Growth Alternative (10% Growth)	High Growth Alternative (15% Growth)
Roadway Preservation & Capacity	Maintain existing preservation schedule; prioritize resurfacing on rural arterials experiencing early increases in vehicle miles traveled.	Increase preservation funding; implement targeted operational improvements (turn lanes, shoulder widening) at village mixed use and commercial access points.	Develop phased capacity improvements on major corridors; consider corridor-level widening, access management, and long-term structural upgrades.
Safety Enhancements	Expand low-cost safety countermeasures (rumble strips, delineation, guardrails) on highspeed rural roads.	Address emerging congestion-related safety issues at key intersections; improve freight turning radii near industrial sites.	Implement comprehensive safety upgrades on major county roadways; integrate climate-resilient design for flood-prone segments.
Transit Service & Demand-Response	Maintain and optimize existing Grays Harbor Transit routes; enhance demand-response scheduling efficiency.	Expand demand-response coverage and service hours; evaluate new circulators in village mixed-use areas.	Plan for long-term transit expansion, including micro-transit pilots, increased frequency, and additional fleet needs.
Active Transportation	Fill critical sidewalk and shoulder gaps near schools and community centers.	Implement priority multimodal corridors in growing residential and mixed-use areas; improve crossings.	Develop a countywide active transportation network; construct shared-use paths and continuous shoulders along major roadways.
Land Use Coordination & Access Management	Apply existing access management policies to new residential and commercial driveways.	Strengthen access spacing requirements along major county roads; encourage clustered development in village mixed-use areas.	Require transportation impact analyses for large commercial/industrial projects; implement corridor-wide access management strategies.
Long-Range Planning & Funding	Update the Transportation Improvement Program to reflect baseline growth.	Pursue state and federal funding for safety and multimodal improvements; refine scenario-based capital planning.	Develop a long-range capital strategy for major roadway upgrades, resilience projects, and multimodal expansion.