



PLAN FOR CLIMATE RESILIENCE 3-YEAR UPDATE



WASHINGTON STATE DEPT OF
**NATURAL
RESOURCES**

HILARY S. FRANZ
COMMISSIONER OF PUBLIC LANDS

APRIL 2023



LETTER FROM THE COMMISSIONER OF PUBLIC LANDS



HILARY S. FRANZ
Commissioner of Public Lands

As Commissioner of Public Lands, I made a commitment to ensure that Washington's lands, waterways, shorelines, and communities thrive, not only today, but into the future.

Three years ago I released our Plan

for Climate Resilience as a call to action, our first step in how DNR would meet this challenge. Our plan created a commitment to lead and a roadmap to address climate risks with climate action.

When we first released our plan, we had no way of knowing just how completely our state (and beyond) would be turned upside by the COVID-19 pandemic. We continue to face unprecedented challenges in our daily lives and in our work.

Alongside these challenges, we continue to see a rise in both frequency and severity from extreme weather events and other impacts from climate change. The communities of Malden and Pine City faced devastating losses from the Babb Road fire. Large wildfires that we typically see east of the Cascades are becoming an ever present risk to our Olympic and coastal regions. Whether it was record-breaking temperatures during the heat dome, the severe flooding from multiple atmospheric river events, or smoke degrading our air quality, climate change continues to present an existential threat to all Washington communities—it knows no boundaries.

Through the passage of the Climate Commitment Act (CCA) and the HEAL Act, our state made the first of many significant steps to lift up and ensure future generations a healthy, safe, and equitable Washington. DNR has successfully leveraged both

legislative action and bold innovation on climate resilience. Through the passage of HB 1168 we've ensured our workforce capacity can meet increasing wildfire risk while simultaneously developing enhanced forest management tools to prevent those wildfires. We established the state's first Kelp and Eelgrass Protection Zone, as our agency moved key legislation to conserve and restore at least 10,000 acres of kelp forests and eelgrass meadows that provide critical habitat for our beloved Salmon populations. In 2022, I announced DNR's Carbon Project, a first-in-the-nation use of carbon markets by a state agency. Our forests are working harder than ever cleaning the air we breathe, capturing and sequestering carbon, providing critical wildlife habitat, and contributing to local economies.

The DNR team continues to strive to build innovative and bold strategies that leverage the unique and technical resources within the agency and across our programs. These climate resilience metrics will be publicly available with consistent and frequent progress reports. As an agency, it is vital we earn the trust of our communities by demonstrating accountability and transparency across our work. Through the actions of our agency, we will continue to seek partnerships and foster productive relationships with our many stakeholders. These efforts are critical; the actions we take toward climate resilience in our state will have an effect across the globe. Now more than ever it is crucial that we work together—across and within our communities—to protect our health and our lands and waters for generations to come.

With continued commitment,

HILARY S. FRANZ
Commissioner of Public Lands



APRIL 2023

DNR'S PLAN FOR CLIMATE RESILIENCE

3-YEAR UPDATE



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DNR RESILIENCE EFFORTS & WASHINGTON EXTREME WEATHER EVENTS (2017–2023)

| | WA EXTREME WEATHER EVENTS | DNR RESILIENCE EFFORTS |
|-------------|--|--|
| 2017 | <ul style="list-style-type: none"> • June: Spartan fire in Chelan County • July: Canyon Creek fire in Okanogan, and the 400 fire in Grant County • September: Sawmill Creek fire in Kittitas County | <ul style="list-style-type: none"> • March: First Good Neighbor Authority agreement signed with US Forest Service • October: Released 20-Year Forest Health Strategic Plan: Eastern Washington • November: Tribal Summit held |
| 2018 | <ul style="list-style-type: none"> • June: Milepost Twenty Two fire in Kittitas County • July: Conrad fire in Yakima County, Rocky Reach fire in Chelan County, Boylston fire in Kittitas County, and Chelan Hills fire in Chelan County • August: Angel Spring fire in Lincoln County, and Boyds fire in Stevens County | <ul style="list-style-type: none"> • October: Blanchard State Forest permanently protected as natural area through a final land transfer • November: Washington State Wildland Fire Protection 10-Year Strategic Plan released • December: 2018–2021 Strategic Plan released |



2019

WA EXTREME WEATHER EVENTS

- **June:** Alkali Canyon fire in Grant County
- **July:** Desert Canyon fire in Douglas County, Left Hand fire in Yakima County, and the Pipeline fire in Yakima County
- **December:** Drought in Washington lasted 147 weeks beginning on December 17, 2019, and ending on October 4, 2022

DNR RESILIENCE EFFORTS

- **May:** "Shared Stewardship" MOU signed with Department of Fish and Wildlife and USDA Forest Service
- **August:** Released update to Wildland Fire Protection 10-Year Strategic Plan

2020

WA EXTREME WEATHER EVENTS

- **July:** Colockum fire in Chelan County, and the Anglin fire in Okanogan County
- **August:** Evans Canyon fire in Yakima County
- **September:** Babb Road fire in Whitman County, Cold Springs fire in Douglas County, Pearl Hill fire in Douglas County, Whitney fire in Lincoln County, Apple Acres fire in Chelan County

DNR RESILIENCE EFFORTS

- **February:** Plan for Climate Resilience released
- **October:** Washington State Forest Action Plan adopted

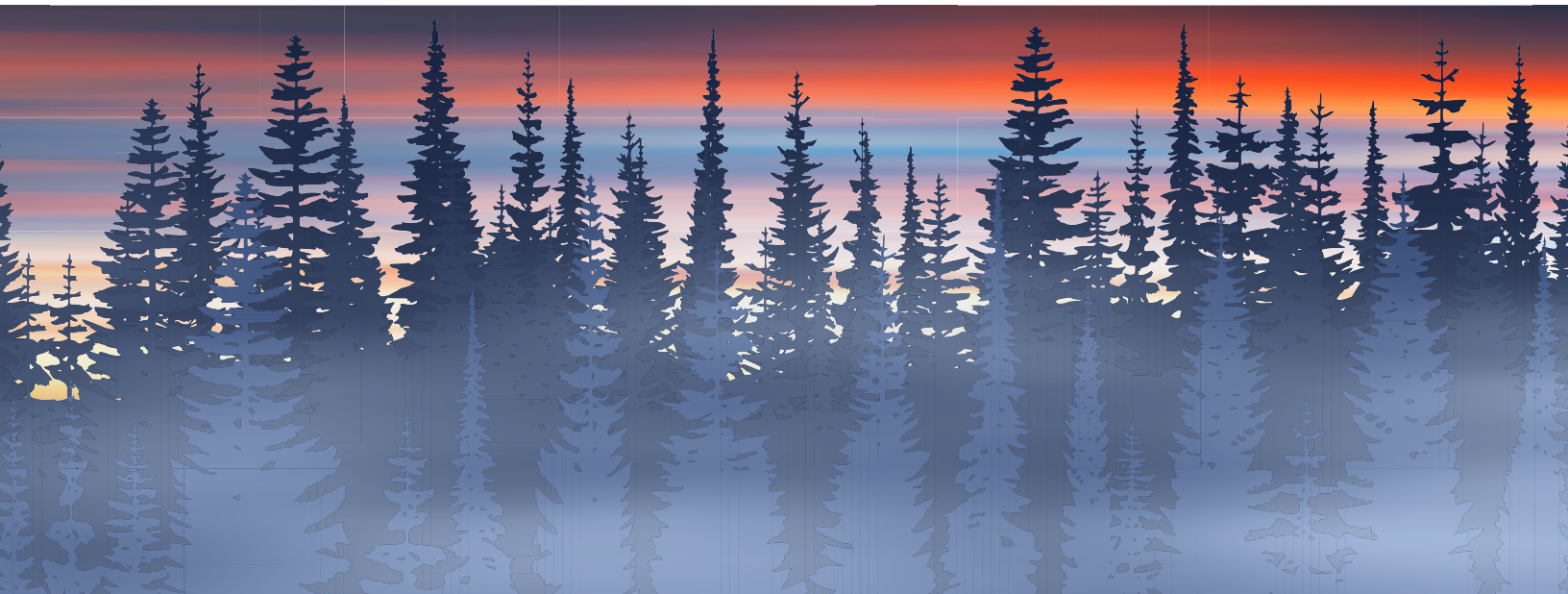



2021
WA EXTREME WEATHER EVENTS

- June:** Record temperatures, known as a 'heat dome' sustained across the Pacific Northwest resulting in loss of human life and extensive ecosystem impacts; Koffman Road fire in Kittitas County
- July:** Batterman Road fire in Douglas County, Andrus fire in Spokane County, Dry Gulch fire in Asotin County, Green Ridge fire in Columbia County, Silcott fire in Asotin County, Cedar Creek fire in Okanogan County, Whitehall Road fire in Douglas County, Burbank fire in Kittitas County, Summit Train fire in Ferry County, Chuweah Creek fire in Okanogan County, Red Apple fire in Chelan County, Club Creek 2 fire in Okanogan County, Goddard Road fire in Stevens County, Sherwood fire in Stevens County, Nelson Creek fire in Spokane County, Spruce Canyon fire in Stevens County, Hazard Hill fire in Spokane County
- August:** Whitmore fire in Okanogan County, Walker Creek fire in Okanogan County, Moe Canyon fire in Chelan County, Schneider Springs fire in Yakima County, Muckamuck fire in Okanogan County, Chickadee Creek fire in Okanogan County, Nason fire in Chelan County, Nine Mine fire in Stevens County, Bulldog Mountain fire in Ferry County, Mack Mountain in Ferry County, Twentyfive Mile fire in Chelan County, Ford Corkscrew fire in Stevens County
- November:** Record rainfall from an atmospheric river resulting in flooding and mudslides disaster declarations in 14 counties

DNR RESILIENCE EFFORTS

- April:** Wildfire Ready Neighbors program launched
- May:** Wildfires, Forests & Communities (2HB 1168) funded to support long-term forest health and reduction of wildfires and Urban & Community Forestry (E2SHB 1216) funded for statewide urban forestry programs promoting the Evergreen Communities Act
- September:** The Building Forest Partnerships awarded more than \$400,000 to forest collaborative working in eastern Washington to
- November:** DNR's First Director of Equity and Environmental Justice hired
- December:** 2030 acres of marbled Murrelet and Northern Spotted Owl Habitat conserved in Pacific, Skamania, and Wahkiakum counties





2022

WA EXTREME WEATHER EVENTS

- **July:** Stayman Flats fire in Chelan County
- **August:** Boulder Mountain fire in Pend Oreille County, Cow Canyon fire in Yakima County, Goat Rocks fire in Stevens County, Lind Fire in Adams County, Vantage Highway fire in Kittitas County, White River fire in Chelan County, Williams Lake fire in Spokane County
- **September:** Bolt Creek Fire in King County, Loch Katrine fire in King County, North Fork fire in Stevens County, Siouxon fire in Skamania County
- **October:** Nakia Creek fire in Clark County; Wildfire in the Northwest led to poor air quality
- **December:** Severe snow and ice events

DNR RESILIENCE EFFORTS

- **January:** Economic Impacts of investing in Climate Resilience through Ecosystem Restoration in Washington state released
- **February:** Watershed Resilience Action Plan (WRAP) and WRAP dashboard launched
- **April:** Carbon Project to preserve 10,000 acres of forested land announced
- **March:** 2022 State of Washington Natural Heritage Plan launched
- **March:** The first Kelp and Eelgrass Protection zone established preserving 2,300 acres of valuable habitat
- **March:** Annual Forest Health Report featured impact of record heat on trees causing mortality, tree defoliation or diseases on more than 555,000 forested acres across Washington
- **March:** 2000–2020 Long-term seagrass monitoring report and storymap released
- **March:** Hosted first Acidification Nearshore Monitoring Network (ANeMoNe) Climate Community Science Summit
- **May:** Derelict Vessel Removal Program (HB 1700) passed; Conserving and Restoring Kelp Forest and Eelgrass Meadows (2SSB 5919) passed; and agency requests to advance LiDAR collection, support drought mitigation, and support a small-forest-landowner work group for carbon offset pilot projects.
- **June:** Tribal Summit held; draft Tribal Consultation policy shared with Tribes; HEAL Act Community Engagement Plan Framework approved
- **July:** Urban and Community Forestry awards more than \$550,000 to 21 statewide projects
- **October:** Landowner Assistance Portal launched

2023

WA EXTREME WEATHER EVENTS

- No significant climate events at time of release

DNR RESILIENCE EFFORTS

- **January:** 2023–2025 Strategic Plan released; Tribal Consultation Policy released
- **March:** Kelp Forest and Eelgrass Conservation and Health Plan collaborative process launched



DNR CLIMATE SHOCKS AND STRESSES

Since the release of the Plan for Climate Resilience in 2020, we continued to face wildfires, extreme heat and drought, flooding and more, making climate resilience work in Washington, and DNR's leadership role in it, more critical. By identifying the potential shocks and stresses, DNR can plan for and manage such risks and opportunities as part of its governance,

strategy, and risk management processes, leading to better alignment across the agency. Through the Plan for Climate Resilience 3-Year report process, DNR staff identified and prioritized 26 shocks and stresses which could impact agency operations and program support.

| | Agricultural & Grazing Lands | Aquatic Resources | Ecosystem Conservation | Equity & Environmental Justice | Forest Management | Landslides, Tsunami, Groundwater | Recreation | Commercial & Industrial Lands | Urban & Community Forestry | Wildfire Management |
|-------------------------------------|------------------------------|-------------------|------------------------|--------------------------------|-------------------|----------------------------------|------------|-------------------------------|----------------------------|---------------------|
| Coastal Flooding | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | |
| Declining Salmon & Orca Populations | | ✓ | ✓ | ✓ | ✓ | | ✓ | | | |
| Drought | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Economic Uncertainty | ✓ | ✓ | | ✓ | ✓ | | | ✓ | ✓ | |
| Erosion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Extreme Cold | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Extreme Heat | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Extreme Precipitation | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Flooding | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Food Access | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ |
| Geoduck Survival | | ✓ | ✓ | ✓ | ✓ | | | | | |
| Insects & Pathogens | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Landslides | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Land Use Conversion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ocean Acidification | | ✓ | ✓ | ✓ | | | | | | |
| Poor Air Quality | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Post-Wildfire Debris Flow | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Sedimentation | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | |
| Sea Level Rise | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | |
| Tsunami | | ✓ | ✓ | ✓ | | ✓ | | | | |
| Urban Heat Island Effect | | | | ✓ | ✓ | | | ✓ | ✓ | |
| Water Quality | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| Weeds & Invasive Insects | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Wildfire | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Workforce Housing | ✓ | | | ✓ | ✓ | | | ✓ | ✓ | ✓ |



PERFORMANCE METRICS & ACCOUNTABILITY

The Plan for Climate Resilience 3-Year report sets 40 high-level metrics across 14 program areas. These metrics will be used to track the overall performance and implementation of our Plan for Climate Resilience. These metrics broadly represent the myriad actions identified in the plan and will be used by the agencies

divisions and program to track progress and identify gaps or needs. DNR will provide, at a minimum, annual updates to the overall progress of the agency's resilience metrics on DNR's website, which can be accessed at <https://www.dnr.wa.gov>

1. Tribal Nations

1.1 Initiate 10 additional collaborations on climate resilience with Tribes by 2025.



2. Equity & Environmental Justice

2.1 Complete 20 Equity Screens for climate resilience projects by 2025.



3. Reducing Carbon Emissions

3.1 Lease 500 Megawatts (MW) or 5,000 acres of new solar power by 2025.

3.2 Reduce greenhouse gas (GHG) emissions from DNR fleet and facilities by 75% by 2040.
**based on the 2005 DNR GHG Emissions of 11,790.3 MTCO₂e*

3.3 Reduce GHG emissions from DNR commute trips annually by increasing the number of DNR workforce using commuter reduction or telework options. **using a 2023 baseline*



4. Wildfire Management

4.1 Keep 95% of DNR wildfires to below 10 acres annually.

4.2 Calculate the annual carbon emissions from Washington state wildfires.

4.3 Reduce the average of human-caused wildfire ignitions by 2.5% annually by 2030.



5. Forest Management

- 5.1 Conserve 10,000 acres of state forests for carbon market opportunities by 2024.
- 5.2 Increase variable density thinning by 10% by 2030. **using a 2022 baseline*
- 5.3 Complete thinning treatments across 1,000 acres of Northern Spotted Owl (NSO) Management Areas by 2040.



6. Forest Resilience and Reforestation

- 6.1 Maintain or improve 100 miles of national forest system roads that contribute to resilient watersheds and forest ecosystems by 2024.
- 6.2 Complete forest health assessment of 1 million acres by 2033.
- 6.3 Complete forest health and risk reduction treatment across 1.25 million acres by 2037.
- 6.4 Conserve 1 million acres of forested land by 2040.
- 6.5 Reforest 1 million acres of forest lands by 2040 including planting climate resilient trees in urban and rural areas.



7. Forest Regulation

- 7.1 Provide at least 90 Small Forest Landowner trainings by 2027.
- 7.2 Correct or remove 120 fish passage barriers annually on streams crossed by forest roads by 2030.
- 7.3 Complete at least 250 application audits annually on forest practice applications for compliance with forest practices rules.



8. Urban and Community Forestry

- 8.1 Maintain and increase equitable tree canopy cover statewide, ensuring that all census block groups have or are on a path to a Tree Equity Score of 75 or higher by 2040.



9. Agricultural and Grazing Lands

- 9.1 Evaluate 100% of DNR water rights at-risk for water curtailments by 2025.
- 9.2 Conduct climate risk assessments for 100% of DNR lease agricultural properties by 2030.
- 9.3 Review 100% of RMPs (Resource Management Plans) to determine if climate change necessitates RMP modification for all new or renewed leases by 2040.





10. Commercial and Industrial Land Use

- 10.1 Evaluate 2.9 million acres of DNR State Trust Lands for potential Clean Energy Program (CEP) mapping project by 2025.
- 10.2 Implement WA Clean Energy Buildings standard for 100% of DNR commercial buildings over 50,000 sq. ft. by 2028.



11. Ecosystem Conservation

- 11.1 Evaluate at least 50% of Managed Natural Areas for climate vulnerability by 2030.
- 11.2 Complete at least 50% of Managed Natural Area plans by 2030.
- 11.3 Identify and protect 100% of Essential Conservation Areas (ECAs) by 2030.



12. Aquatic Resources

- 12.1 Complete 100% of the Watershed Resilience Action Plan 3-year outcomes by 2025.
- 12.2 Update 100% of Aquatics Resources guiding documents to reflect climate change by 2030.
- 12.3 Improve aquatic lands by removing 100% of current derelict vessels of concern by 2031.
**using a baseline inventory of 320 vessels*
- 12.4 Conserve and restore 10,000 acres of kelp forests and eelgrass meadows by 2040.
- 12.5 Include Climate Actions as a component within 100% of all DNR Aquatic Leases by 2040.



13. Landslides, Tsunamis, and Groundwater

- 13.1 Update the Geologic Information Portal to display 100% of sea level projections for public access by 2024.
- 13.2 Add as many as 5,000 new geotechnical, water well, and other subsurface boring logs and attributes to the Geologic Information Portal by 2024.
- 13.3 Develop a collaborative plan to incorporate sea level rise into tsunami probabilistic modeling along 100% of Washington state coasts to inform building code standards by 2025.
- 13.4 Send WALERT (Wildfire-Associated Landslide Emergency Response Teams) to 100% of qualifying fires annually to assess post-fire landslide risk and provide recommendations.



14. Recreation

- 14.1 Conduct a Recreation Asset Inventory (RAI) for 100% of facilities, roads, trails, and other infrastructure by 2023.
- 14.2 Assess 100% of recreation areas to prioritize for re-vegetation by 2024.
- 14.3 Perform a risk assessment on 100% of recreation areas to evaluate risk as due to climate or extreme climate-related events by 2030.











PLAN FOR CLIMATE RESILIENCE PROGRAM STATUS UPDATES AND HIGHLIGHTS

| | | | | |
|------------|---|--|--|---|
| KEY |  PLAY |  PAUSE |  STOPPED |  AFFECTED BY COVID-19 |
| | | | | |

1. Tribal Nations

| | | |
|--|--|---|
|  | Program Metrics | |
| | 1.1 Initiate 10 additional collaborations on climate resilience with Tribes by 2025. | |
| | Update | |
| | <p><i>DNR commits to regular and consistent communication and consultation with Tribes as implementation steps are developed and evolve, and regular communication with the ATNI Climate Change Program and other tribal forums on climate change and climate resilience.</i></p> <p>https://www.dnr.wa.gov/about/tribal-relations</p> | |
| Expanded Tribal Relations Program | |   |

2. Equity and Environmental Justice

| | | |
|---|--|---|
|  | Program Metrics | |
| | 2.1 Complete 20 Equity Screens for climate resilience projects by 2025. | |
| | Update | |
| | <p><i>Starting in the fall of 2021, DNR and six other state agencies (Departments of Agriculture, Commerce, Ecology, Health, Transportation, and the Puget Sound Partnership) began meeting with Environmental Justice Council staff to collaborate on the development, authorship, and adoption of this interagency Community Engagement Guide for the first HEAL Act milestone in July 2022. Additional milestones were completed in January 2023, including DNR releasing an updated 2023–2025 Strategic Plan, Tribal Consultation Policy, and Community Engagement Guide.</i></p> <p>https://www.dnr.wa.gov/EnvironmentalJustice</p> | |
| New Equity and Environmental Justice Program | |   |



3. Reducing Carbon Emissions



Program Metrics

- 3.1 Lease 500 Megawatts (MW) or 5,000 acres of new solar power by 2025.
- 3.2 Reduce greenhouse gas (GHG) emissions from DNR fleet and facilities by 75% by 2040. **based on the 2005 DNR GHG Emissions of 11,790.3 MTCO₂e*
- 3.3 Reduce GHG emissions from DNR commute trips annually by increasing the number of DNR workforce using commuter reduction or telework options. **using a 2023 baseline*

Update

The Washington State Department of Natural Resources recognizes the immediate and significant actions needed to respond to climate change through the introduction of an agency Net Zero initiative. Reducing agency emissions as well as creating healthy and safe spaces to work and engage with communities will benefit the public health and safety across Washington. By prioritizing and developing actionable measures, DNR's Net Zero proposal will make bold significant steps to ensure a sustainable and clean environment. The agency was successful in obtaining legislative funding for the 2023–2025 biennium. The proposal includes a request for funding to perform a fleet charging infrastructure assessments, Electrical Vehicle procurement, and energy efficiency building evaluations across both DNR facilities and DNR commercial buildings portfolio.

https://www.dnr.wa.gov/publications/em_leg_dnr_net_zero_facilities_fleet_2023.pdf

Reducing Washington State Emissions: Renewable Energy



Reducing Washington State Emissions: Development and Construction



Reducing Washington State Emissions: Wildfire and Forest Health



Reducing DNR Emissions: Fleet and Facilities



Reducing DNR Emissions: Communications and Travel



4. Wildfire Management

| | | |
|--|--|--|
| | Program Metrics | |
| | <p>4.1 Keep 95% of DNR wildfires to below 10 acres annually.</p> <p>4.2 Calculate the total carbon emissions from Washington state wildfires annually.</p> <p>4.3 Reduce human-caused wildfire ignitions by a minimum of 2.5% annually by 2030.</p> | |
| <p><i>"Easier access to information on forest health, stewardship, and wildfire prevention will help landowners protect their homes and forests. Healthy forests, no matter what size, provide benefits to all who live in Washington."</i></p> <p>—Hilary S. Franz, Commissoner of Public Lands</p> | Update | |
| | <p><i>Wildfire Ready Neighbors (WRN) is a new DNR initiative that focuses on increasing community resistance in the face of ever increasing wildfire danger. WRN uses an innovative outreach approach that employs the power of "social marketing" to drive community awareness and interest in making their homes and small, private forests better prepared for wildfire. The initiative also harnesses existing community partners such as local fire districts, conservation districts, and non-profit organizations to add capacity to DNR forces to complete home and forest wildfire assessments. This approach not only adds capacity, it opens doors and makes lasting connections within communities to work together to improve wildfire preparedness. WRN provides a compelling, easy to access, and free opportunity for the public to become better prepared. Community members are directed to WildfireReady.com, guided through providing basic information about their home, and then receive a customized preparedness plan that shows them the steps they can take to improve the resistance of their home to wildfire. To date, WRN has helped over 4,600 participants take more than 23,000 actions to become better prepared for wildfire in reaching seven counties in the state with communities that face the greatest threat from wildfire. It's also recognized that the threat of wildfire is not only an eastern Washington issue, and in the spring of 2023, WRN was launched in three pilot communities west of the Cascades, reaching areas at high risk of wildfire in western Washington.</i></p> <p>https://wildfireready.dnr.wa.gov/</p> | |
| | <p>Reduce human-caused wildfire ignitions and address increasing wildfire risk in the wildland urban interface (WUI)</p> | |
| <p>Enhance and sustain a wildfire workforce to support increased fire response.</p> | | |



5. Forest Management



Program Metrics

- 5.1 Conserve 10,000 acres of state forests for carbon market opportunities by 2024.
- 5.2 Increase variable density thinning by 10% by 2030.**using a 2022 baseline*
- 5.3 Complete thinning treatments across 1,000 acres of Northern Spotted Owl (NSO) Management Areas by 2040.

Update

One of the foundations of reforestation success is planting trees that are genetically adapted to the planting site. In the Pacific Northwest, this has typically been accomplished by using “local” seed; local is most commonly defined by a system of polygons, in which seed is both collected and planted back within the same polygon and within the same elevation range. As climate change creates stress and variable adaptation conditions, it is important to evaluate seed sources that have evolved in climatic conditions similar to what is expected in the near future at the planting site. In May of 2022, DNR initiated a seed source trial to explore how various seed sources perform in changing conditions within Washington. A trial design included a project plan of using twenty-three seed sources to be planted across multiple sites across Washington. Of these species, 18 will be woods-run seed sources with 6 each from Washington, Oregon, and California. These seed sources were selected to represent a wide temperature range within each state. The results of this study will provide valuable information to support DNR’s reforestation and forest resilience programs. Seed study results are expected in Spring of 2023.

<https://www.fs.usda.gov/pnw/projects/douglas-fir-seed-source-movement-trial>

Develop climate-resilient seed management and reforestation approaches.



Promote climate-suitable strategies for at risk species.



Prepare for increased variability in harvest opportunities under changing climate conditions.



Design and maintain forest roads to be resilient under current and projected climate conditions.



Support implementation of DNR’s 20-Year Forest Health Strategic Plan, the Wildland Fire Protection 10-Year Strategic Plan and the 2020 Forest Action Plan.







6. Forest Resilience and Reforestation



Program Metrics

- 6.1 Maintain or improve 100 miles of national forest system roads that contribute to resilient watersheds and forest ecosystems by 2024.
- 6.2 Complete forest health assessment of 1 million acres by 2033.
- 6.3 Complete forest health and risk reduction treatment across 1.25 million acres by 2037.
- 6.4 Conserve 1 million acres of forested land by 2040.
- 6.5 Reforest 1 million acres of forest lands by 2040 including planting climate resilient trees in urban and rural areas.

Update

In 2021, DNR utilized Good Neighbor Authority (GNA) to complete over 410 acres of forest restoration treatments, 1,225 acres of non-commercial forest health treatments on the Okanogan-Wenatchee National Forest and 401 acres of forest health treatments on the Gifford Pinchot National Forest. In addition to the agency's utilization of GNA, the competitive Building Forest Partnerships grant program awarded funding to forest collaboratives working in western Washington to support accelerated forest health planning and treatments in their communities, including on national forests. Funding was awarded over two state fiscal years to the Darrington Collaborative, Olympic Forest Collaborative, Pinchot Partners, and South Gifford Pinchot Collaborative.

https://www.dnr.wa.gov/sites/default/files/publications/2021_forest_action_plan_annual_report_final.pdf

Address forest health and increased wildfire risk on eastern Washington forestlands.



In 2019, the Washington State Legislature passed House Bill 1784, which requires DNR to emphasize treatments that will have both a forest health benefit as well as a benefit for wildfire response operations into our all-lands Forest Health Assessment and Treatment Framework in support of the 20-Year Forest Health Strategic Plan: Eastern Washington. HB 1784 amended RCW 76.06.200, the Forest Health Assessment and Treatment Framework, to require the prioritization of forest health treatments that maximize forest health outcomes and planned tools for wildfire response operations. The Forest Resiliency Division of DNR collaborated with a technical team and local partners to pilot the new methodology in three priority areas: Methow Valley, Cle Elum, and Leavenworth. The results of the dual-benefit analysis will be integrated into landscape evaluations for each priority landscape in eastern Washington. Additional priority landscapes will receive dual-benefit analysis in 2022.

https://www.dnr.wa.gov/sites/default/files/publications/2021_forest_action_plan_annual_report_final.pdf

Develop post-wildfire recovery and restoration strategies.



6. Forest Resilience and Reforestation *(continued)*



Update

In March of 2022, DNR's Forest Health Science Team, working within the Forest Resilience Division, produced the Wildfire Season 2021—Work of Wildfire Assessment report. The overall goal was to develop a rapid, data-driven assessment of the effects of the 2021 wildfires across all lands in eastern Washington. The Forest Health Science Team quantified how fires moved landscapes towards and away from the resilience, risk reduction, and climate adaptation objectives of the 20-Year Plan. The Forest Health Science Team also explored and developed initial methods to quantify fire effects, update forest health and wildfire risk reduction treatment needs, inform post-fire management, assess wildfire interactions with forest health treatments, and evaluate how treatments influenced wildfire management operations. We learned much about the work of wildfires and our process for evaluating them during this pilot year, and we have a clear plan for assessments of future fire seasons.

https://www.dnr.wa.gov/publications/rp_workofwildfire2021_march2022.pdf

Enhance watershed health and forest drought mitigation.



The spring of 2021 was the second-driest on record in Washington, and then an unprecedented late-June heatwave increased temperatures statewide, triggering an emergency drought declaration covering 96 percent of the state. Climate change increases our state's vulnerability to drought, and impacts from a shortage of water affects not only forests but our way of life. Therefore, in addition to increasing the efficiency and effectiveness of our water usage, DNR is investing in drought mitigation strategies to hold water naturally on the landscape longer. One strategy is collaborating with partners, both human and animal. In 2021, DNR's Forest Resilience Division used funds from House Bill 1168 to continue a partnership with the Colville Confederated Tribes, Trout Unlimited, and Cascadia Conservation District to construct and maintain beaver dam analogs in complement to community outreach, native planting, and beaver relocation onto federal lands. The dams that they create with logs and debris can rebuild eroded streams and restore wetland habitat. The dams also create ponds that can store water longer in the face of drought. In 2020, these partners built 34 beaver dam analogs in Okanogan and Chelan Counties, planted 700 native plants, and relocated 15 beavers.

https://www.dnr.wa.gov/sites/default/files/publications/2021_forest_action_plan_annual_report_final.pdf

Increase DNR's small forest landowner forest health assistance capacity.





7. Forest Regulation



Program Metrics

- 7.1 Provide at least 90 Small Forest Landowner trainings by 2027.
- 7.2 Correct or remove 120 fish passage barriers annually on streams crossed by forest roads by 2030.
- 7.3 Complete at least 250 application audits annually on forest practice applications for compliance with forest practices rules.

Update

DNR's Small Forest Landowner Office increased its ability to provide timely consultations with small forest landowners by boosting its "regulation assistance" team from one to eight team members. As a part of the agency's overall integrated forest landowner assistance program, this team helps landowners understand and prepare complete forest practices applications that are needed when a landowner wants to carry out activities like timber harvesting, road construction, or correction of fish passage barrier. Based in locations across the state, this team provided 732 assistance responses to individual landowners between July 1, 2021 and June 30, 2022. The program also publishes a quarterly newsletter, accessible here: <https://sflonews.wordpress.com> that has approximately 4,900 subscribers. <https://www.dnr.wa.gov/programs-and-services/forest-practices/small-forest-landowners/technical-assistance-landowners>

Enhance monitoring to assess standards for culverts and bridges.



The Forest Practices Board established RMAP in 2001, requiring large landowners to bring all roads constructed between 1976 and 2001 up to current forest practices standards. The program has been carried out since then in collaboration with DNR, Tribes, Washington States Departments of Ecology and Fish and Wildlife. Washington state's large landowners have corrected nearly 8,500 fish passage barriers and reopened 5,200 miles of fish habitat since 2001 under the Washington Road Maintenance and Abandonment Plan (RMAP) process. In May of 2021, DNR successfully leveraged legislative funding prioritizing structurally deficient bridges and projects identified as 'improving roads for salmon'. Project work would create over 100 direct road construction jobs, open up miles of salmon habitat, and keep roads safe for timber hauling and recreation access. <https://www.dnr.wa.gov/programs-and-services/forest-practices/rule-implementation>

Assess reforestation requirements.



Assess implications of climate change on potentially unstable slopes.



Assess implications of climate change on Forest Practices Adaptive Management studies.



Enhance retention of working forest land held by small forest landowners.



8. Urban and Community Forestry



Program Metrics

8.1 Maintain and increase equitable tree canopy cover statewide, ensuring that all census block groups have or are on a path to a Tree Equity Score of 75 or higher by 2040.

Update

In 2020, the Washington Community Forestry Council (WCFC) assisted the Department of Natural Resources' Urban and Community Forestry (UCF) Program with setting goals for equity and inclusion in the Washington State Forest Action Plan. The first of four urban forestry goals outlined in the plan is to "Advance the equitable delivery of program services to address urban forestry needs in communities or neighborhoods that may be particularly vulnerable to the effects of climate change." Both the program and the council are currently pursuing a number of identified subtasks that will reshape how the program delivers services to constituents, prioritizing equity and environmental justice in the process. In April 2023, DNR signed a memorandum of understanding with American Forests (AF) and announced a partnership to increase the pace and scale of work to achieve tree equity throughout the state. As part of the MOU, DNR and AF launched a first-of-its-kind Tree Equity Collaborative to engage cities, community organizations and stakeholders to build rigorous and inclusive urban forestry programs. In the 2023 legislative session, the UCF program received \$6 million from the legislature and an additional \$6 million from federal funding, which will significantly scale up grant funding for communities, provide additional staff capacity, and enable UCF to make progress toward the objectives set out in the MOU with American Forests.

<https://www.dnr.wa.gov/urbanforestry>

Provide assistance in municipalities to support urban forest management that is climate informed and includes fire-adapted community strategies.





9. Agricultural and Grazing Lands



Program Metrics

- 9.1 Evaluate 100% of DNR water rights at-risk for water curtailments by 2025.
- 9.2 Conduct a climate change impact assessment on 100% of DNR's agricultural lands by 2030 to identify and quantify climate change on potential impacts on DNR's agricultural assets.
- 9.3 Review RMP (Resource Management Plans) requirements and identify if climate change impacts necessitate RMP language modification for incorporation into 100% of new or renewed agricultural leases by 2040.

Update

DNR manages nearly 4,000 acres of irrigated agricultural land in the Odessa subarea of eastern Washington. Due to rapid climate change and drought conditions, the Odessa Subarea aquifers are declining to such a drastic extent that wells used for agricultural purposes are starting to run dry. Based on the results of the Odessa Subarea Special Study led by the Bureau of Reclamation and Department of Ecology, the program plans to protect the declining aquifer levels in the Odessa area by converting 13 of its ground water rights (total of 9,600 acrefeet) into surface water rights.

The benefits of converting ground water rights into surface rights and related infrastructure include the conservation of groundwater, slowed decline in aquifer levels, preservation over 70,000 acres of irrigated agriculture, increased employment during development of the surface water infrastructure, reduced losses in farm income, and reduced or eliminated negative social consequences on communities within the Odessa subarea. These water rights conversions allow DNR to conserve highly unstable groundwater supplies and provide much needed irrigated land for local, regional, and national agricultural products including potatoes, onions and other rotational crops.
<https://www.dnr.wa.gov/agriculture>

Address climate change risks to roads and infrastructure.



Reduce risk of financial loss from disturbances such as wildfire, drought, and flooding.



Reduce risk of water curtailments on DNR managed lands.



Advance clean energy and carbon sequestration on DNR-managed lands.



10. Commercial and Industrial Land Use



Program Metrics

10.1 Evaluate 2.9 million acres of DNR State Trust Lands for potential Clean Energy Program (CEP) mapping project by 2025.

10.2 Implement WA Clean Energy Buildings standard for 100% of DNR commercial buildings over 50,000 sq. ft. by 2028.

Update

In 2022, DNR launched the initial phase of a solar mapping project to assist in identifying potential renewable energy sites to help developers find and connect with DNR lease lands that can offer the lowest risk and highest solar potential. The Clean Energy Program has developed a draft mapping tool to proactively assess DNR managed trust lands for potential solar development lease opportunities. This tool will include incorporation of agriculture, cultural resource, environmental, and habitat considerations. As part of the mapping project, the Clean Energy Program is working with tribes and stakeholders to identify the earliest opportunities for outreach, including with other state agencies.

<https://wadnr.maps.arcgis.com/apps/webappviewer/index.html?id=d0364fb0d1104f87b4e7e8549fb7f220>

Address climate change risks to roads and infrastructure.



Strengthen resilience to infrastructure damage through encouraging climate informed design



Reduce GHG emissions from transportation by exploring responsible development in transit-oriented locations.



Advance clean energy on DNR-managed lands.





11. Ecosystem Conservation



Program Metrics

11.1 Evaluate at least 50% DNR Managed Natural Areas for climate vulnerability by 2030.

11.2 Complete at least 50% DNR Managed Natural Area plans by 2030.

11.3 Identify and protect 100% of Essential Conservation Areas (ECAs) by 2030.

Assess vulnerability and enhance monitoring of Natural Areas.



Update

DNR's Forest Hazard Reduction capital dollars appropriated for the 2019–2021 biennium funded work on 21 sites within two priority landscapes to control noxious and invasive weeds in DNR-managed natural areas and adjacent lands. DNR contracted with the Mountains to Sound Greenway Trust and Hood Canal Salmon Enhancement Group to complete the project. The same funding source was also used to purchase and deliver 3,595 tons of rock to surface seven miles of road across three priority landscapes touching the Mount Baker Snoqualmie National Forest. The work facilitated safe access for planned restoration activities and recreation, and improved water quality in the Nooksack, Upper White, and Stillaguamish watersheds.
https://www.dnr.wa.gov/publications/amp_nh_plan_2022.pdf

Incorporate climate change considerations into Natural Areas site prioritization, selection, and design.



Fund and implement statewide inventory of rare species and ecosystems.



In the 2020 Plan for Climate Resilience, DNR committed to increasing “collaboration with other conservation organizations, including federal and state agencies and non-profit land trusts to identify areas that may provide connectivity for rare species and rare and high-quality ecosystems” Over the past two years, DNR has made gains in this commitment through sponsoring US Fish and Wildlife Section 6 Land Acquisition Grants. These grants support the development and implementation of conservation programs for the benefit of resident threatened and endangered listed species. There are currently three projects that have been awarded to DNR and its land trust partners to acquire and permanently protect approximately 2,400 acres of private lands, valued at an estimated \$10.8 million.
https://www.dnr.wa.gov/publications/amp_nh_plan_2022.pdf

12. Aquatic Resources



Program Metrics

- 12.1 Complete 100% of the Watershed Resilience Action Plan 3-year outcomes by 2025.
- 12.2 Update 100% of Aquatics Resources guiding documents to reflect climate change by 2030.
- 12.3 Improve aquatic lands by removing 100% of current derelict vessels of concern by 2031. **using a baseline inventory of 320 vessels*
- 12.4 Conserve and restore 10,000 acres of Kelp forests and Eelgrass meadows by 2040.
- 12.5 Include Climate Actions as a component within 100% of all DNR Aquatic Leases by 2040.

Identify areas of high vulnerability to lessee activities and establish strategies for resilience.



Develop strategies to protect and restore aquatic habitats that provide refuge for sensitive species and also support resilience from climate-related impacts.



Update

DNR has established a nearshore network of 13 sites from Willapa Bay to Cherry Point to monitor water quality and habitat characteristics potentially affected by a changing climate. The Acidification Nearshore Monitoring Network (ANeMoNe) is sustained with the assistance of a dedicated crew of volunteer community scientists who clean and maintain deployed sensors year-round and conduct biological surveys in the spring and summer. The Aquatic Assessment and Monitoring Team (AAMT) has also developed a place-based Climate Resilience Youth Internship intended to engage high school students from communities disproportionately vulnerable to climate impacts. Through hands-on experience at ANeMoNe stations with scientific monitoring and field data collection, youth learn the fundamentals of climate science. Students are mentored by AAMT scientists and local community members.

They receive an education in environmental science, environmental justice, targeted skills, and leadership training.

<https://storymaps.arcgis.com/stories/c76da7a4540e44f8b7a99fe8dc071a90>

In spring 2022, AAMT hosted a Climate Resilience Community Science Summit with over 100 participants. The Summit was an opportunity to present ANeMoNe monitoring and research findings, build partnerships, and provide community members a forum to offer their feedback and suggestions.

Accelerate salmon and orca recovery efforts.





12. Aquatic Resources (continued)



In February of 2022, DNR released the Watershed Resilience Action Plan (WRAP). The WRAP coordinates, enhances and maximizes investments and work to protect and restore salmon habitat—at a watershed scale—in ways that also provide jobs and build healthier, more equitable communities. In May of 2022, the legislature approved a \$400,000 investment in critical salmon recovery projects prioritized in DNR’s WRAP. This includes creating a watershed steward position to lead and coordination implementation of the Plan, a fish passage barrier survey coordinated with small forest landowners, a water quality assessment to identify contamination harmful to salmon populations, and partnering with local schools to have Water Resource Inventory Area (WRIA) 7 serve as an outdoor classroom for salmon recovery. In early 2023 DNR’s first Watershed Steward was hired to work with partners to continue the implementation of the WRAP in the Snohomish Watershed.

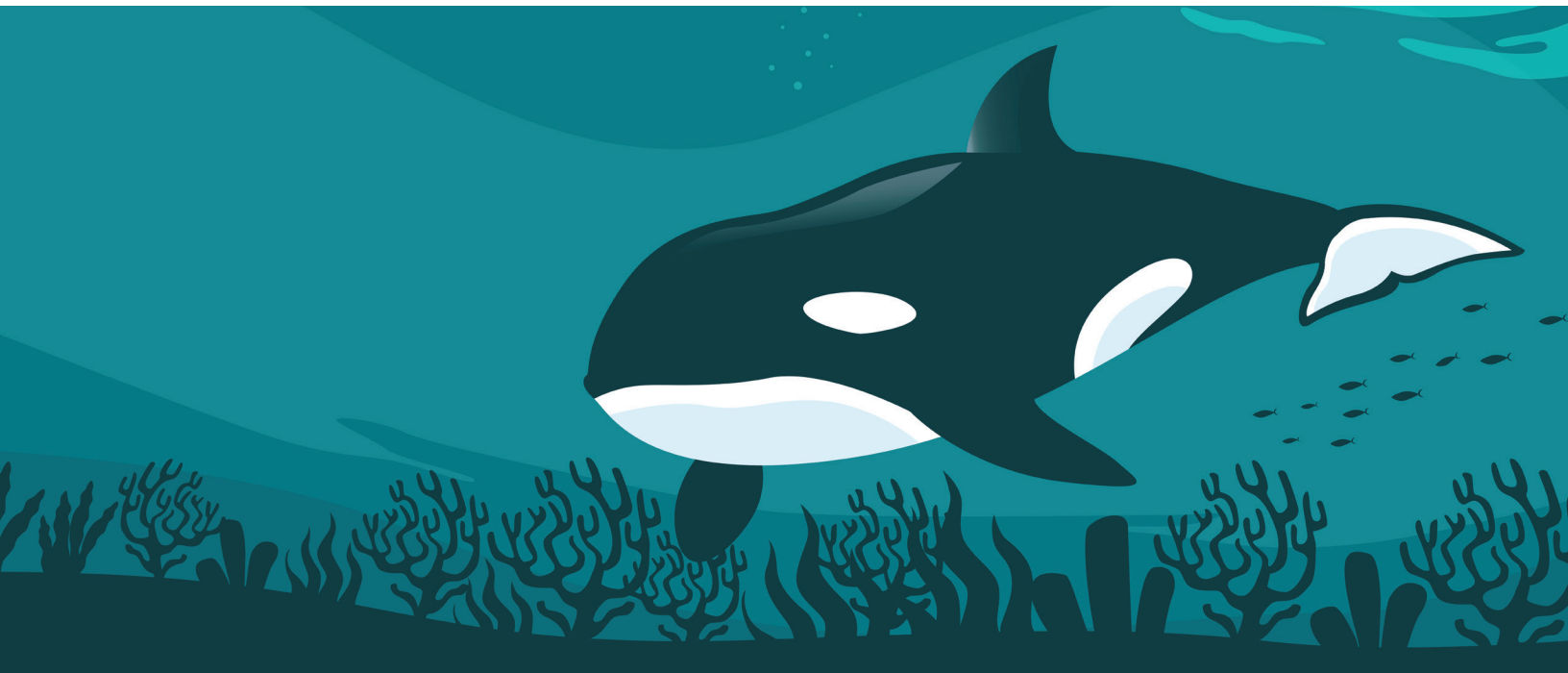
<https://www.dnr.wa.gov/WRAP>

Anticipate and prepare for increases in derelict vessels and structures on state owned aquatic lands.



In March of 2022, DNR sponsored HB 1700 establishing a dedicated funding source of twenty-five percent from the watercraft excise tax. This reliable and consistent funding will ensure that the Derelict Vessel Recovery Program (DVRP) can continue to remove significantly more vessels each year with sustainable funding mechanisms in place. The result of this increased capacity can provide not only safer, clear waters throughout the state; but will also provide the additional support to authorized public entities, particularly in more rural areas that lack on-water resources, so they can initiate more removals within their jurisdictions.

Update guiding documents to support appropriate responses to changing climate conditions.



13. Landslides, Tsunamis and Groundwater



Program Metrics

- 13.1** Update the Geologic Information Portal to display 100% of sea level projections for public access by 2024.
- 13.2** Add as many as 5,000 new geotechnical, water well, and other subsurface boring logs and attributes to the Geologic Information Portal by 2024.
- 13.3** Develop a collaborative plan to incorporate sea level rise into tsunami probabilistic modeling along 100% of Washington State coasts to inform building code standards by 2025.
- 13.4** Send WALERT (Wildfire-Associated Landslide Emergency Response Teams) to 100% of qualifying fires annually to assess post-fire landslide risk and provide recommendations.

Accelerate assessment of water and groundwater resources.



Improve landslide modeling and inventory mapping.



Update

In July 2022, DNR released a complete landslide inventory for Snohomish County, which included more than 15,000 landslides mapped using LiDAR. These studies inform local jurisdictions about their exposure to one of the most common geologic hazards exacerbated by the effects of climate change.

The Wildfire-Associated Landslide Emergency Response Team (WALERT) performed post-fire debris flow assessments for dozens of 2020 and 2021 wildfires across the state, and the team has deployed rain gauges within some burned areas to assist the U.S. Geological Survey in debris flow prediction models being developed for our region. <https://www.dnr.wa.gov/programs-and-services/geology/geologic-hazards/landslides>

Improve tsunami modeling methods to accommodate rising sea levels, changing erosion patterns, and other climate influenced impacts



DNR released modeling to show the effects of a hypothetical tsunami from a very large earthquake scenario on the Seattle Fault, which traverses the Puget Lowland from Issaquah westward to the Hood Canal. The massively destructive impact of a high-magnitude tsunami has major implications for the needed readiness of our region, and sea level rise will likely exacerbate these effects. <https://www.dnr.wa.gov/programs-and-services/geology/geologic-hazards/tsunamis#tsunami-simulation-videos>

The Program also provided technical assistance in the pre-development analysis and siting of the newly-constructed, Auntie Lee tsunami vertical evacuation structure in Tokeland, WA, where evacuation to higher ground by the Shoalwater Bay Tribe and neighboring communities would otherwise be impossible. (continued)



13. Landslides, Tsunamis and Groundwater (continued)



<https://www.dnr.wa.gov/news/updated-maps-reveal-reduced-walk-time-to-keloland-peninsula-after-addition-vertical-evacuation>

Integrate climate change impacts into development of data, analysis, and risk models.

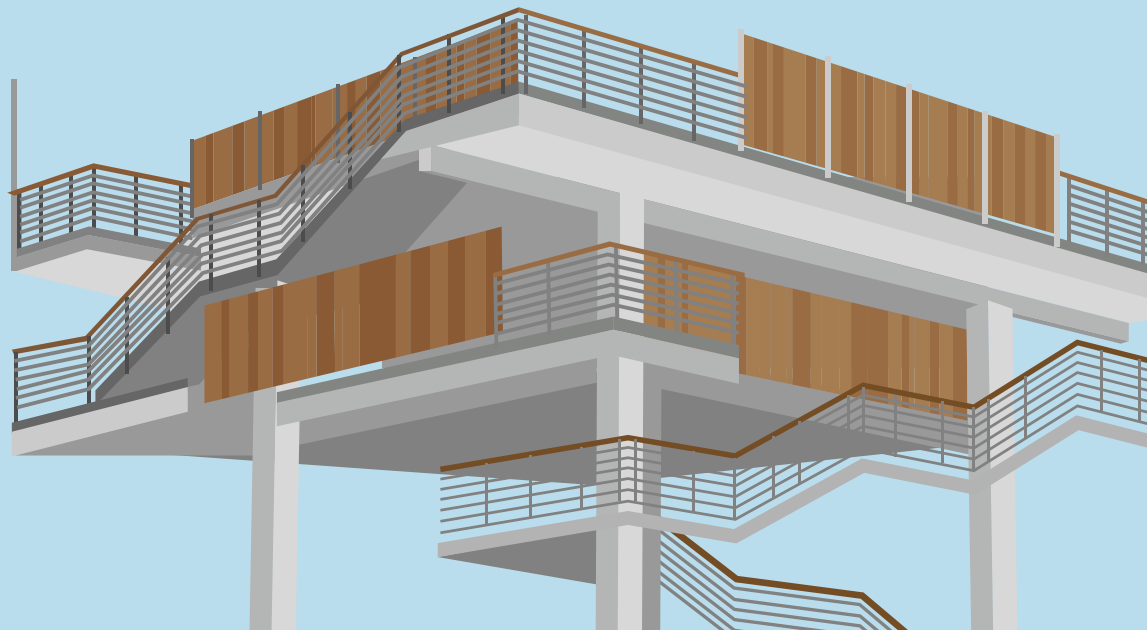


DNR received an additional operating budget in the 21–23 legislative session to establish a new Washington Geological Survey (WGS) program devoted to climate resilience in the Columbia Basin, specifically related to geothermal resources, geologic carbon sequestration, and hydrogeology. This new program will identify and map resources, costs, and risks, and conduct outreach with stakeholders, partner agencies, and major landowners to overcome limitations to use in this growing area.

www.dnr.wa.gov/geologic-carbon-sequestration

Additionally, WGS received funding to hire a much-needed geologic planning liaison to work directly with local jurisdictions and the Department of Commerce to gather feedback on WGS's products, provide technical guidance related to geological hazards and mineral resources, and engage with state partners on climate resilience.

<https://www.dnr.wa.gov/programs-and-services/geology/geologic-planning>





14. Recreation



Program Metrics

14.1 Conduct a Recreation Asset Inventory (RAI) for 100% of facilities, roads, trails and other infrastructure by 2023.

14.2 Assess 100% of recreation areas to prioritize for re-vegetation by 2024.

14.3 Perform a risk assessment on 100% of recreation areas to evaluate risk as due to climate or extreme climate-related events by 2030.

Prepare for potential evacuation or rescue from recreation sites due to extreme climate-related events.



Increase management of trees in campgrounds, at trailheads, and on trails.



Strengthen resilience to infrastructure damage through climate-informed design of recreation infrastructure.



Update

Since 2020 DNR recreation has advanced multiple projects in the Snoqualmie corridor to increase non-motorized trail connectivity between communities and public lands and to provide public transportation access to multiple trailheads. In 2021, design work was completed for new Highpoint and Tiger Summit Trailheads, which incorporate Trailhead Direct shuttle stops. Trailhead Direct is a King County program that provides shuttle service between urban centers (especially underserved areas) to popular outdoor recreation destinations. The Highpoint trailhead design also includes bicycle/ pedestrian access across I-90 to connect with public lands on the north side of the highway. Permitting for these projects will begin in 2022 and construction will begin once permitting is completed. DNR secured \$235,000 in RCO grants for the design work and an additional \$1,050,000 in RCO grants for construction of these projects. Match was provided by DNR, King County, and the City of Issaquah. These projects increase access to high-quality recreation for those without vehicles and improve non-motorized trail connections between DNR lands and local communities by utilizing and improving the existing regional and local trail networks.

<https://www.dnr.wa.gov/projects>

Increase the availability of high-quality recreation to all.












DNR SUPPORTING GLOBAL CLIMATE ACTION IN WASHINGTON

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for people and the planet, now and into the future. The Sustainable Development Goals (SDGs) are 17 comprehensive, integrated goals that help to describe a set of critical economic, social, and environmental objectives which are used globally. By integrating the SDGs into DNR's Plan for Climate Resilience newly established metrics

we are able to show how these priority areas align to and is meeting the investments called for by the SDGs and communicate our work through this globally-know framework. DNR will continue taking an active role in measuring our programs critical work as we contribute to making a global community impact.

SUSTAINABLE DEVELOPMENT GOALS

| UN Goal Name and Description | | DNR Climate Resilience Metric |
|---|---|---|
|  | 1. No Poverty End poverty in all of its forms everywhere. | 1.1, 2.1 |
|  | 2. Zero Hunger End hunger, achieve food security and improved nutrition and promote sustainable agriculture. | 1.1, 2.1, 9.1, 9.2, 9.3 |
|  | 3. Good Health and Well-being Ensure healthy lives and promote well-being for all at all ages. | 1.1, 2.1, 3.2, 3.3, 8.1, 4.2, 10.2, 13.3, 13.4 |
|  | 4. Quality Education Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | 1.1, 2.1, 7.1, 12.1 |
|  | 5. Gender Equality Achieve gender equality and empower all women and girls. | 1.1, 2.1 |
|  | 6. Clean Water and Sanitation Ensure availability and sustainable management of water and sanitation for all. | 1.1, 2.1, 6.1, 9.1, 9.2, 12.1, 12.2, 12.3, 12.4, 12.5, 13.2 |
|  | 7. Affordable and Clean Energy Ensure access to affordable, reliable, sustainable and modern energy for all. | 1.1, 2.1, 3.1, 10.1, 10.2 |

| UN Goal Name and Description | | DNR Climate Resilience Metric |
|---|---|---|
|  | <p>8. Decent Work and Economic Growth Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p> | 1.1, 2.1, 3.1, 3.2, 3.3, 7.1, 10.1, 10.2 |
|  | <p>9. Industry, Innovation and Infrastructure Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.</p> | 1.1, 2.1, 3.1, 3.2, 3.3, 6.1, 10.1, 10.2, 13.1, 13.3, 13.4 |
|  | <p>10. Reduced Inequalities Reduce inequality within and among countries.</p> | 1.1, 2.1 |
|  | <p>11. Sustainable Cities and Communities Make cities and human settlements inclusive, safe, resilient and sustainable.</p> | 1.1, 2.1, 3.1, 3.2, 3.3, 8.1, 9.1, 9.2, 9.3, 10.1, 10.2, 13.1, 13.2, 13.3, 13.4 |
|  | <p>12. Responsible Consumption and Production Ensure sustainable consumption and production patterns.</p> | 1.1, 2.1, 3.1, 3.2, 3.3, 5.1, 6.2, 6.3, 6.4, 6.5, 7.1, 9.1, 9.2, 9.3, 10.1, 10.2 |
|  | <p>13. Climate Action Take urgent action to combat climate change and its impact.</p> | ALL METRICS |
|  | <p>14. Life Below Water Conserve and sustainably use the oceans, seas and marine resources for sustainable development.</p> | 1.1, 2.1, 12.1, 12.2, 12.3, 12.4, 12.5, |
|  | <p>15. Life on Land Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.</p> | 1.1, 2.1, 4.1, 4.3, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 6.4, 6.5, 7.1, 7.2, 7.3, 8.1, 9.1, 9.2, 9.3, 11.1, 11.2, 11.3, 14.1, 14.2, 14.3 |
|  | <p>16. Peace, Justice and Strong Institutions Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p> | 1.1, 2.1 |
|  | <p>17. Partnerships for the Goals Strengthen the means of implementation and revitalize the global partnership for sustainable development.</p> | 1.1, 2.1 |



LOOKING AHEAD

Building partnerships is critical for addressing the robust agenda set by DNR's Plan for Climate Resilience and our newly established metrics in this 3-year report. DNR will continue to seek opportunities within the public and private sector including exploring ways to learn from local, tribal, statewide, national and international partnerships to advance climate resilience. For example:

-DNR recently launched the Washington Tree Equity Collaborative, a community of practice aimed at operationalizing tree equity goals across the state. Through the Collaborative, DNR and American Forests will help cities, towns, Tribes and their partners build rigorous and inclusive urban forestry programs. Local community-based organizations will serve as partners in the planning and execution of action plans and targeted urban forestry projects.

-DNR will be establishing a geoduck task force to investigate opportunities to reduce negative impacts to tribal treaty and state geoduck harvests and to promote long-term opportunities to expand or sustain geoduck harvest. The task force will be made up of representatives of Tribes with treaty or reserved rights to geoduck harvest in Washington state, other state agencies and a representative of the academic community.

-DNR is continuing to partner with the Department of Commerce, offering guidance for cities and counties to integrate into their comprehensive planning. Alongside six state agencies, DNR staff created scalable and measurable policy recommendations to reduce greenhouse gas emissions and build resilience in local communities.

-DNR recently hosted the Pacific Northwest Wildfire Conference, which convened state and federal agency personnel, private industry, wildfire practitioners, Tribes and other frontline communities from around the United States.

-DNR is also advancing international partnerships, most notably with public, private and academic partners in the Republic of Finland and their counterparts in Washington state to advance sustainable forestry and support a robust bioeconomy, including exploration of mass timber and other wood byproducts.

2023 LEGISLATIVE SESSION UPDATES

During the 2023 Legislative Session, the Department of Natural Resources worked with the Governor and State Legislators to secure \$41.39 million of the state's Climate Commitment Act funding including advancing the following agency climate priorities:

- Bull kelp restoration
- Clean energy siting
- Climate change response strategy
- Climate-smart forest treatments
- Environmental justice
- Evaluation of carbon offsets
- GHG emissions reductions/net zero facilities
- Local government climate planning
- Natural areas conservation
- Natural resources workforce development
- Reforestation strategy and mapping
- Urban forestry
- Watershed resilience implementation and expansion to additional watersheds

Only through being proactive and growing partnerships will we ensure that the way we manage natural resources can continue to adapt to the changing climate, engage our communities to prioritize sustainable and equitable paths to natural resources management, and empower a bioeconomy that thrives and transforms to better support future generations.



THANK YOU

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