



Washington State Department
of Natural Resources

Aquatic Resources Program Habitat Conservation Plan

Puget Sound Partnership
Leadership Council Meeting
November 9, 2007

Washington State Aquatic Lands Management Goals

Strive to provide a balance of public benefits
for all citizens of the state through:

- Fostering water dependent uses
- Encouraging public access
- Ensuring environmental protection
- Utilizing renewable resources
- Generate revenue when consistent with these public benefits

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DNR Stewardship



- ✓ Derelict Vessel Program
- ✓ District restoration projects
- ✓ Creosote removal
- ✓ Aquatic Reserves
- ✓ Withdrawal from leasing
- ✓ Conservation leasing
- ✓ Sediment clean-up

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Topics

- Habitat Conservation Plans – Definition, Requirements
- DNRs HCP – Background, Covered activities & species, Analysis methods, Results, Conservation methods
- Puget Sound Action Agenda – Connections
- HCP Next Steps

Habitat Conservation Plans

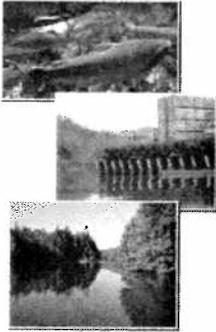
- ✓ Negotiated agreement between NOAA Fisheries, US Fish and Wildlife and DNR
- ✓ Undertaken after DNR determined that our activities may cause take of listed and sensitive species
- ✓ Describes how DNR will avoid, minimize and compensate for impacts to species and their habitats
- ✓ Basis for an Incidental Take Permit

Habitat Conservation Plans

Required Elements

- ✓ Impacts to listed species
- ✓ Avoidance, minimization and compensation
- ✓ Alternatives that avoid take
- ✓ Unforeseen circumstances
- ✓ Monitoring (Compliance, Effectiveness, Validation)
- ✓ Adaptive management
- ✓ Funding mechanisms

DNR's Habitat Conservation Plan

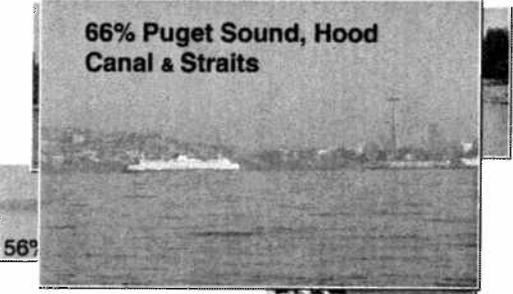


- ✓ Long term conservation of species
- ✓ Assurances
- ✓ Ecosystem management

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HCP Planning Area

≈ 2.4 Million Acres



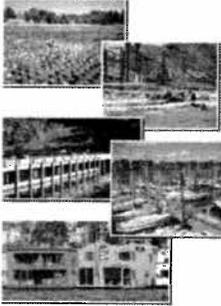
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<p>Best Available Science</p> <ul style="list-style-type: none"> • Activity effects • Species requirements • Species/activity interactions • Habitat effects • Model <ul style="list-style-type: none"> ✓ Magnitude of Effect ✓ Potential Affected Area 	<p>Legal Authority</p> <ul style="list-style-type: none"> • Regulatory overlap • Permit requirements • Perceived risk of take
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Covered Activities

3 Groups, 11 Activities



Aquaculture (shellfish, finfish)

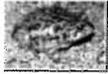
Log booming and storage

Overwater structures (docks & wharves, boat ramps/launches, floats & rafts, mooring buoys, nearshore buildings, floating homes, marinas, shipyards & terminals)

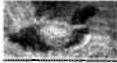
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Covered Species

4 Associations, 22 Species



Herptofauna - Columbia spotted frog, Northern leopard frog, Western toad, Western pond turtle



Birds - Bald eagle, Black tern, California brown pelican, Common loon, Harlequin duck, Marbled murrelet, Western snowy plover



Fish - Bull trout/Dolly Varden, Chinook, Chum, Coastal cutthroat trout, Coho, Pink, Sockeye/Kokanee, Steelhead, Green & White sturgeon



Marine mammal - Southern resident killer whale

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Species Selection

Criteria

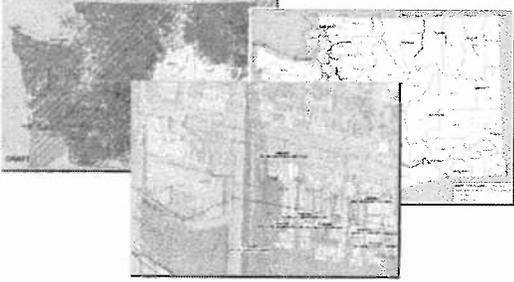


- Occurrence on state-owned aquatic lands
- Dependence on submerged lands for habitat
- Vulnerability to Washington DNR authorized activities
- Critical benefit to species from inclusion

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Potential Effects Model

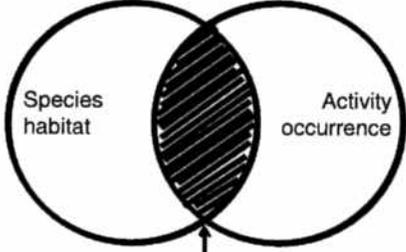
Database Construction



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Potential Effects Model

Analysis of Geographic Overlap



Potentially Affected Area

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Conservation Measures

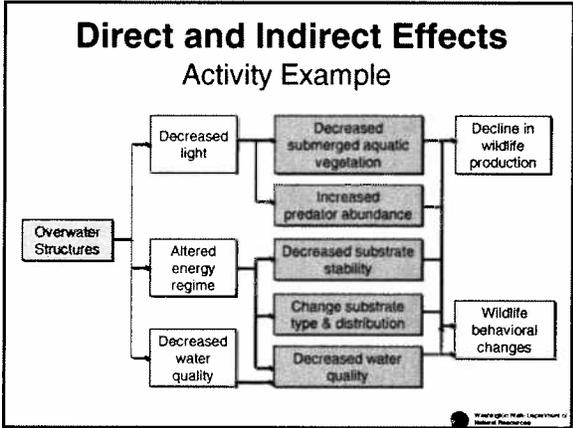
Effects from Covered activities



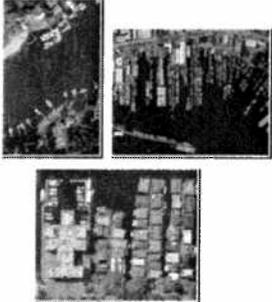
Most often related to:

- ✓ Shading
- ✓ Water quality
- ✓ Benthic and sediment alterations

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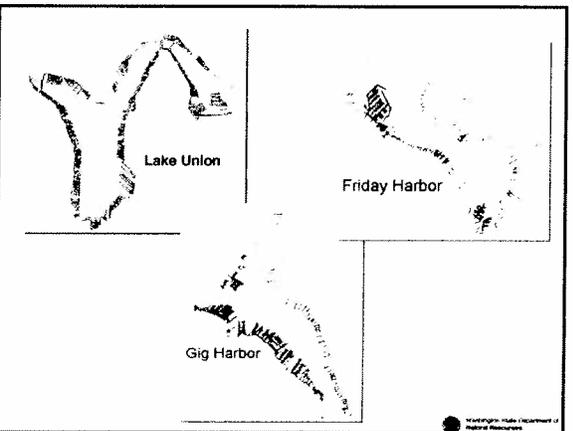


Overwater Structures Project



- Spatially quantify structures on state-owned land
- Assess impacts
- Proportion under lease

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Results for Docks Marine and Lakes

Dock Size	Number		Footprint (acres)	
		On State Land		On State Land
Small*	19,541	85%	384	88%
Large	3,019	95%	1,664	96%
Total	22,560	86%	2,048	95%

* Small docks are those less than 2,343.65 feet²

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Small Docks By Geographic Region

Region	Number	Percent of Total	On State Land (%)
Puget Sound Basin*	15,332	78%	93%
Eastern WA	4,015	21%	24%
Southwest WA**	138	1%	1%
Olympic Coast***	73	0.4%	0.4%

* Island, Jefferson, King, Kitsap, Mason, Pierce, San Juan, Skagit, Snohomish, Thurston, Whatcom Counties
 ** Clark, Cowlitz, Lewis Counties
 *** Grays Harbor, Pacific Counties

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Conservation Measures Lease Specific



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Conservation Measures

Programmatic



Avoiding effects - Withdrawal;
Reserves; Prohibitions

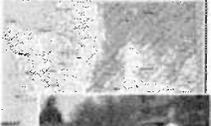
Compensating for those that
can't be minimized - Habitat
creation; Restoration; Purchase
& protection of similar habitat



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Conservation Measures

Programmatic





1st - Identify areas of state-owned lands important to covered species and species associations

2nd - Prioritize/group using adjacent land use, cover, submerged aquatic vegetation

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Multiple Considerations





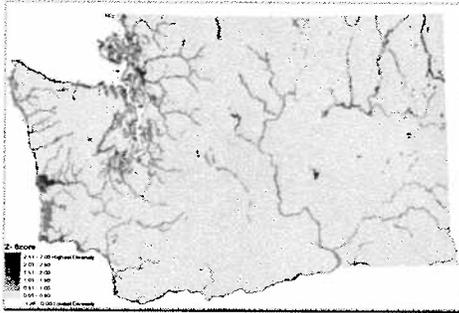


- ✓ Significant differences in species habitat requirements and ranges
- ✓ Standardized methods across species groups

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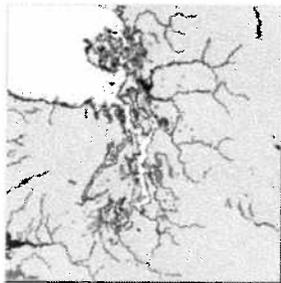
Draft Site Ranking

All Species



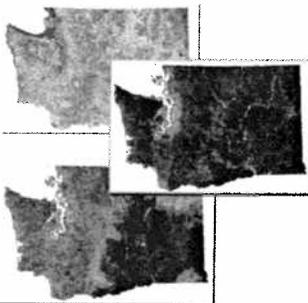
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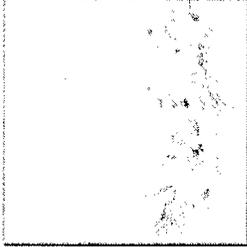
Next Steps

Adjacent Land Use



- Cover type
- Impervious surfaces
- Conservation status
- Forest canopy

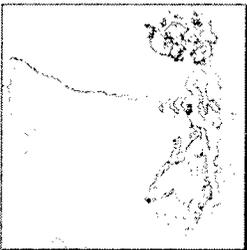
Next Steps
Forage Fish Habitat



- Herring spawning and holding
- Sand lance spawning
- Surf smelt spawning

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Next Steps
Marine Vegetation



- Eelgrass
- Floating & non-floating kelp
- Salt marsh vegetation

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Puget Sound Action Agenda
Connections

- Protect habitat
- Restore habitat
- Reduce toxic pollution
- Reduce human/animal waste
- Better manage stormwater
- Assure adequate water supply
- Preserve biodiversity, recover species
- Build and sustain the capacity for action

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Puget Sound Action Agenda

Connections

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Next Steps for HCP

2006 to 2008

- HCP & EIS development
- Additional research
- Stakeholder outreach

2008

- Formal public review of draft HCP & EIS (NEPA/SEPA)

2009

- Legislative funding
- Adoption & implementation

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HCP Implementation Needs

- Compliance monitoring plan
- Effectiveness monitoring plan
- Research data gaps
- Adaptive management plan
- Data management
- Biologists, land managers, and technical staff

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