Geographic Response Plans (GRPs)





Max Gordon Spill Prevention, Preparedness, and Response Program

Key Messages

- Ecology is a Response Resource.
- Geographic Response Plans (GRPs) are one of the tools we use to respond to oil spills on or near the water.
- GRPs are developed with input from communities; it's an inclusive process.







Questions to Answer

- Why are Geographic Response Plans (GRPs) important?
- What are they? What's in them?
- How are they developed?
- How might they be used during an oil spill?
- Admiralty Inlet GRP Update & Timeline
- How you can help?



Why are GRPs Important?

- Part of the regional & area plan for spill response called the Northwest Area Contingency Plan (NWACP)
- Focused on the protection of sensitive resources during a spill; those on or near the water.
- Goes beyond efforts to control and contain a spill at or near the source.
- Helps ensure consistency and coordination in the way we protect sensitive resources during oil spills (federal, state, tribal, & local).
- Provides trustees and the public a voice on areas of concern or importance to them.



Currently, 27 GRP Areas in Washington State





What are Geographic Response Plans (GRPs)?

- One of several plans used during early hours of an oil spill and beyond.
- Spills on or near the water
- Are deployed to protect sensitive resource during initial phase (early hours) of a spill response.
- Plans that focus on the protection of natural, cultural, and economic resources; not spill control and containment.
- Sensitive resources and strategies for protection are pre-identified





What is in the Plan?

- Spill Response Contact Sheet
- Chapter 1 Introduction
- Chapter 2 Site Description
- Chapter 3 Response Options & Considerations
- Chapter 4 Response Strategies & Priorities
- Chapter 5 Shoreline Countermeasures or "Reserved"
- Chapter 6 Resources at Risk





Spill Response Contact Sheet

- Federal and State required notifications (NRC & WEMD)
- Federal Agencies (USCG, EPA, USDOI, NOAA, USFWS)
- State Agency Contacts (Ecology, WDFW, DNR, Health, WDAHP, Parks)
- Tribal Governments
- Local Governments (County & Municipal)
- Response Contractors
- Regulated Industry and Others (Facilities, Vessel Companies, Pipeline, Rail)

SPILL R	ESPONS	E CONTACT SHEE	т
Burning	National Inc. Do	Spills & Hassednes Salesiance Relations	
Federal Notfication - National Despon			(9001-424-6902*
State Netfloation - Washington Dear		Divide	1001 258,52907
			and caroove
	- Other (Corner Numbers -	
U.S. Finds second differentian Agency		Westington Suiz	
Ingian III - Spill Desperant - weathington cost office	(200) 993 (2007 (200) 752-9127	Dept Anthonology & Historic Personalism page of posicies	(NR) NA WAS
waanington op: once waanington op: once	000 100-007	 Headquarters (Lacev) 	(and) an excess
- NEW CONTRACTOR	(200) 001-0040	 - Seathware regional office (uppy) 	Contraction
10000	1000 2020 2020	Capt of Child and Wildlife	AND DRAWN
		 Of 2pill Team (2)those Page () 	200 201-0220*
U.S. Gard Court		- Orgion 5 (Vancouver)	1300 695 6211
bezor columbia silver		 company/rests / addresses 	200 001-0107*
 command center 	beckerse and	press of realth (prinking ryaned)	0001303-0023
- wetchmender	040 00-000	 After normal business hours 	0000 903-9900
 Inside Charagement Services 	NOT 041-4477	Dept of Malanal Researces	740 102 3044
 Marries Safety Und ForSand 	(101) 240-61123	Dept of it apportation	380 701-7008
- NSU Kottland Marine Em Katpense	CHES 2404579	sweekington State Parks and Passeation	00000002-0544
13th Gent Gaard Obirkt	CHOICE SHE2-4644 S	Meshington State Robal (Obtaint 5)	2003 049-2908
Matine of Sindle Dance Georgianities Context	(P57) 931-6008		
Paula Sola Tran	04P0 MX 9911		
		Trikel Cardinalis	
Nelsonal Concern Management Advanced a de		Circlaria Controles alord Teles	(340) 273-0011
		- Califarat Resources	B/L 1998
boeraris support coordinator	(201) 220-0028	 Return Records Rubic taby 	E/L 3008
weather (1773 Portland)	Designation	 Publicating/ coefic reden tribe 	(200) 273-7081 (200) 275-3200
		wrand conde-confederated inities	000 875-008
other sedentil agencies		relana varior	000 00-01/2 000
us, sith a wildlife service pase	(300) S34-8313 ⁸		Contraction and
115 Department of Interlay	540 3252400		
		inclusion and	
		Ots of Gottle Dark (Police)	560 234 4711
Papeleo Gragonico, Balmado, & Dars.		City of Kalance (False)	340 671 2148
RP Diputation Paperland	(BAR) 271-8AAB*	City of Richar (Palace)	340 473 1773
our legger monthern searca ve sollway	DECEMBER OF DEC	Uts of Longriew (sins)	Case) #42-0000
Columbia and Convite & allegad	0001030-0105	city of winiock (indice)	1996-285-3996
Lewis and Clark (Columbia Basin) Railroad	301 341-6132	City of Woodland (Police)	(360) 223-6000
Padificary (Mervin Dan)	261 812-6627	clark cavaty - crash	
racona Public utilities (Mayfield bern)	0010014038	 wolice/vire plapesch (county-wide) 	(200) 680-6400*
Entern Provide Buildman	3444 877 3342*	Sequick (second read)	(544) 893,91117
		CBRA Daily Dillace	(582) 585 (2155*
		Combile County (River group Services)	(56) 877 4158
Response Contractors (CRED & PEC)		Low a County (Bring procy Manager and)	(100) 740-0110
Cowbita Clean Develop	(III) (D-616)		
lakibal Diving and Jakiage	(200) 823-0025" (200) 221-2420"	* Connect Muniform attelled 34 heary/thy	



Chapter 1 - Introduction

- Answers What & Why (What the plan is and why it exists)
- Describes Area Covered (planning area)
- Describes GRP Development Process
- Language Used (NIIMS ICS terminology)
- Terminology & Definitions (Reference back to NWACP)

CLARE CONLIFE SWIEWS GRP	DC10328.2015
CHAPTER 1	
INTRODUCTIO	n an
This plan focuses on sensitive resource pretection of her as in and above to recure varianteer's orders during the small play planning ones. This have a proved by playeout the deepotent the development during the third with and write and a train a still an independent of a source have the planning the unprevent. The train planning the planning the supervent in the planning the supervent in the submitted by providing the firm and information provided	have of an orleaged response in the GDP have 10 and the Chains and Go-Chains of its stores. We want to sing is that itself. We want your imput and hope are solverst comments or others of the standards to GRDs Program gov or
The GDP planning area help remiter within Clark, Cavitz an indice of the Consersor River, S1 miles of the Cavitz River, is the news twee quadratic set of the star and star of the thun it raises at the Yourks River. Fully or partially, the other tangeness, tailgetied, Vancasev, walkah, and vancaland for the planning sets at an include approximate division for the help (and gas at a star of the periods of Witter Resonan- ticheland), water as (or space) the help area of SW Levin GM (Salaron Washengal). The Clark Levin to and SW Levin GM	2 miles of the Kalama Roser, 17 miles of less of the Lutie subana storer, and more of Lattle Rock, Kalama, Kala, II watan the human area of the plan- turescory Area 24 (WRA-23, Upper WHA 27 (Lessed), and WHA 28 Planning area of bordered by the
The bulk of the plan is contained in Grapher 4. R provides in strategies and the under they chould be repletessaried, based their proximity to sensitive restources. Areas and sector maps beat insuch inclutions are also provided in that chapter.	ion parential spill origin porets and
Control and Containment of an Oli Spi	
than the Implementation of GRP 2	ft of an oli spill at or near the source of a
upli in the backles, or it has even to its controlled and operating containment. Intermitting the data with Section 4.3 of this United Germand is forward. It is important to note that pipel down bed a first plan, should be juic need all sections and strategy band as a high priority in Section 4.3 would not require the first section of that areas however, they pipel inspirately information because would be Daring as an	a plan aboutd faits precedence until a response priorities, beyond those displit trajectory endeling, a booming centrally be implemented if a split menty tables should be followed small.
	12201



Chapter 2 – Site Description

- Physical Features (Geography & Geology)
- Hydrology
- Climate & Winds
- Tides & Currents
- Risk Assessment (Oil spill risks present in planning area)

CLARE OFWERE SW LEWIS GRO	OCTOBER 2013
CHAPT	ER 2
SITE DESCR	RIPTION
2.1 CHAPTER INTRODUCTION	
This chapter provides a theory picton of the array's pipe and after an overview of oil optil radius in values which so protected or southwestern Leven County. The planning of Whitelet (bibliowing the baceline of HWF 12), and this congresse would be to be a south the travel follows the Cowfan Herer from areas the could near set follows the Cowfan Herer from areas the travel here to South, the planning wave includes the tensors here to South, the planning wave includes the tensors here to South 2000 Arrow and 2000 (Biblio Mainer Herearton Hereratory Area 120 (Biblio Cowfan), While 37 (Levels, and WHE). All (Sainon Cowfan Rever, Talana, Levet, Little Statum, and Toeth Unitary of tensors the Galac Cowfan and WHE would SRP to the north and the Lower Columbia River GRP of SRP to the north and the Lower Columbia River GRP of	vision of Clark and Crivita Doutton, and a serve existent from Variaouxer, WA to gai Lords and othe Lower Colonsitio River from Utern half of the planning area. The GUP sho for the tobardon Rover to the Negliciki Dam or other of Winhold, Carlie Rock, Nata, Stells Greened and Variaouxer. Portoan of Christiani, WHA to (Daryy Moderna), WHA -Warkengal), and Industry the Colonand Wing planning area in berdeved by the Christian in Planese, as well as a number of smaller
2.2 PHYSICAL FEATURES	
The geographic features of the land in the Carl. Covi then bouton between the castern finale of the Wills feature of the feature Memory Range. The people contain the the feature Memory Range area known as the V is British Delandon. Carabis and worth to Uregon. To contain include highway, rul and pipeline norme, a Columba Javer. The conductor periods of the planning methophications of the provider a period of the planning methophications of the state of the planning and the periods is primarily invested with mixed humiland.	pa Hills/Columbia River and the western plue depression is a portion of the larger Milaerster Valley Paget Transpir that runs south gatheast transportation systems in the in twel as mean accessful ports on the genera pays of the greater twethard
The Paget Lowland was shaped by the Cordillaria. Ice part south of Olympia. Since the notest of the glacter w imports of glacial retreat meaned a distinguishing rule	van located north of the planning area, the
¹ Washington State Departmeter of Menoel Descences, On https://www.doc.magov/BasearchScience/Topics/Get	
CHARTE	



Chapter 3 – Response Options & Considerations

- Cities/Towns in Planning Area
- Waterbody Types (at or near those cities or towns)
- Potential Response Options (wildlife recover, skimming, dispersant use, burning)
- Considerations for those Locations (access issues, ownership of lands, T&E species, risks)
- Map of Locations Mentioned

_		Location								
	CHAPTER 3		_	_		4				
	RESPONSE OPTIONS AND CONSIDERATIONS	Vancourer	Ridgeneid	Weedland	Kelanna	Longdow/Kolso	Castle Bock	Toleto	Winhels	
_	Reco		•		•	•	•		•	
	Creeks		٠	٠					•	
Valentiody	Laker.							-		
ę.	Pool Area formed by Dam				_					
Ξ.	Tidally Infinenced Areas		•							
5	Wetland Area(x)							•	•	
	Internittent Streams (Seasonal Flow)	_		-	_					
	Source Control and Containment Activities		•		•	•			•	
2	Actual / Vessel Surveillance Activities									
otential Response Options	Wildlife Berrue and Rehabilitation Activities		•						•	
5	Air Boat lite (Areas Recommended)		•	-	-		-	-	-	
ž.	Collection for Skinning Operations (Notes)								•	
ž.,	Ventel Based Skinnsing Operations (Mercy)						-		-	
Ξ.	Shore Based Skinsming Operations (Nos.3)									
2	Shoreside Protection Rooming (VA-9)									
i.	Shoredide Cleanup Activities (July a)									
2	In-Situ Barning (New 6)									
	Dispersent Usy (New 5)									
				_				_		
	Shoreside Access can be Limited by Geography		٠	٠	٠	٠	٠	٠	٠	
	Shorenide Access can be Limited by Private			٠			٠		٠	
	State or National Wildlife Refuge / Recreation					_				
	Threatened/Endangered Terrestrial Species (New		•	٠	•	•			•	
÷	Public or Commercial Marina[x] in Area		٠					-		
ŝ	Commercial Vessel Novement / Port Area	٠			•		_			
5	Recreational Boat Traffic	٠	٠	•	•	•	٠			
onside allons	Tribal Lands or U and A Interests (New 7)		•						•	
8	Historie / Cultural District(s) in Area									
-	Dam(s) to Area									
	Interstate Highway Corridor	٠			•	•	•		•	
	Od Movement by Rallin Area		•						•	
	Oil Pipeline(s) in Area								•	



Chapter 4 – Response Strategies & Priorities

- Bulk of the Plan is in this chapter
- Area & Sub-Area (Sector) Maps
- Priority Tables

 (order response strategies should be deployed based on the location where an oil spill occurs)
- Matrix/Tabular Information
- Detailed 2-Page Information Sheets
 - Response Strategies
 - Notification Strategies
 - Staging Areas
 - Boat Launch Locations

	LARK / COWLITZ GRAPHIC RESPONSE PLAN
	(CCSWL GRP)
	CHAPTER 4
RESPONS	E STRATEGIES AND PRIORIT
	October 2015
	CHAPTER 1



Chapter 4 – Area Maps





Chapter 4 – Sector Maps





Chapter 4 – Priority Tables



Table 4	.7									
			LKV	VA-E" (Lake	e N	/ashington	- South)			
Priority	Strategy Number	Sector Map	Straingy Matrix	Strategy Details		Priority	Stroi- ₆ y Number	Sector Map	Strategy Matrix	Strategy Details
	N - Winds	from the N					S - Winds fi	rom the SOl	JTH	
1	LKWA-46.1	4-24	4-29	4A-21		1	MAYC-0.0	4-24	4-32	4A-37
2	JHNSC0.0	4-24	4-27	4A-11		2	COALC-0.0	4-23	4-25	4A-5
3	CEDRR-0.1	4-24	4-25	4A-3		3	LKWA-35.4	4-23	4-28	4A-19
	NW - Winds fr	om the NO	RTHWEST				SE - Winds fro	m the SOUT	HEAST	
1	LKWA-46.1	4-24	4-29	4A-21		1	LKWA-51.2	4-24	4-29	4A-23
2	JHNSC-0.0	4-24	4-27	4A-11		2	TYLRC-0.0	4-24	4-36	4A-59
3	CEDRR-0.1	4-24	4-25	4A-3	1		E - Winds	from the EA	ST	
	W - Wind	s from the \	WEST		1	1	TYLRC-0.0	4-24	4-36	4A-59
1	JHNSC0.0	4-24	4-27	4A-11	1	2	LKWA-51.2	4-24	4-29	4A-23
2	LKWA-46.1	4-24	4-29	4A-21	1		NE - Winds fro	m the NOR	THEAST	
3	MAYC-0.0	4-24	4-32	4A-37]	1	TYLRC-0.0	4-24	4-36	4A-59
	SW - Winds fr	om the SOL	JTHWEST			2	CEDRR-0.1	4-24	4-25	4A-3
1	MAYC-0.0	4-24	4-32	4A-37]	3	LKWA-46.1	4-24	4-29	4A-21
2	COALC-0.0	4-24	4-25	4A-5]	4	JHNSC-0.0	4-24	4-27	4A-11
3	LKWA-35.4	4-23	4-28	4A-19	1					



Matrix/Tabular Information

Strategy Number	Location	Strategy Type	Boom Length	Boat Req?	StagingArea	Resources at Risk	Comments	Sector Map (Page#)	Strategy Details (Page#)
KWA-73.4	Seattle Union Bay Natural Area UW Campus N47.65206 W122.29565	Exclusion	4200	Yes	Off-Site: Use Warren G. Magnuson Park (Seattle) for Staging Area & Boat Launch (SA-LKWA-79.1 & BL-LKWA-79.1)	General Fish & Wildlife Resources; Freshwater Wildlife; Sensitive Habitat	Notify Unversity of Washington Police; call (206) 685-8973. Inform UW Botanic Gardens; call (206) 543-8616. Due to the size of this strategy, constant maintenance/tending will likely be required for it to remain effective.	4-22	4A-35
MAYC-0.0	Renton Barbee Mill May Creek N47.52796 W122.20522	Exclusion	450ft	Yes	Off-Site: Stage in boat launch parking area at Gene Coulon Park (SA-LKWA- 45.5 & BL-LKWA-45.5)	General Fish & Wildlife Resources, Freshwaer Wildlife	Winds from the south can push lake water up into May Creek. Area along creek right was toxics cleanup site.	4-24	4A-37
MAYC-0.4	Renton May Creek N47.52989 W122.20099	Collection	100ft	No	On-Site: Stage on north side of roadway off Lake Washington Blvd N. Follow WADOT work zone traffic control guidelines.	General Fish & Wildlife Resources, Freshwaer Wildlife	Temporary use of roadway or shoulder is needed to implement this strategy; follow WADOT work zone traffic control guidelines. If staging or working on roadway or sholder, inform City of Renton Police at (425) 430-7500.	4-24	4A-39



Detailed 2-Page Information Sheets

- Location & Nearest Address
- Objective
- Site Contact
- How to Implement
- Staging (on-site or off-site)
- Site Safety/Hazards
- Field Notes (additional information of value)
- Equipment & Personnel
- Driving Directions & Map
- Strategy Diagram & Site Photograph





Cowlitz River	at north end of Gerha	art Gardens Park			CWLZR-1.65
Position - Location:	46° 6.698', -122° 53.758'	46° 6' 41.9", -122° 53'	45.5"	46.11163, -122.89597	Longview
Strategy Objective:	Collection : Collect oil moving do	ownstream on the Cowlitz Rive	r		
Implementation:	After anchors are set, tow boom u	pstream and secure to anchor	at Point	flow, in relatively straight line between Po B, then all remaining anchor points betwe . Use vac-truck or skimmer with storage f	een Points A & B. At
Staging Area:	Onsite: Stage equipment at Gerha	art Gardens Park			
Site Safety:	Slips, Trips, Falls; Water Hazard; V	egetation.			
Field Notes:	Collection strategy just north of the	e boat ramp.			
Watercourse:	River - Cowlitz River	Chinaak and Chum) Steeling	ad		
Watercourse: Resources at Risk:	River - Cowlitz River Freshwater Wildlife, Salmon (Coh	o, Chinook and Chum), Steelhe		ulpment	
		10 ⁻	nded Eq	<i>ulpment</i> unchoring System(s) - (anchor, lines, floats)	
		Recomme	nded Eq	•	
		Recommendation 3 Eac	nded Eq h A h A	nchoring System(s) - (anchor, lines, floats)	
		Recommendation 3 Eacon 1 Eacon	nded Eq h A h A t E	inchoring System(s) - (anchor, lines, floats) inchoring System(s)- Shoreside	
		Recomme 3 Eac 1 Eac 300 Fee	nded Eq h A h A t E h V	inchoring System(s) - (anchor, lines, floats) inchoring System(s)- Shoreside loom - B3 (River Boom) or equivalent	unt of boom
		Recommendation of the second s	ndedEq h A h A t E h V h V	inchoring System(s) - (anchor, lines, floats) inchoring System(s)- Shoreside loom - B3 (River Boom) or equivalent 'ac Truck or Skimmer and Storage Vorkboat(s) - of adequate size for type and amo	unt of boom
		Recommendation	ndedEq h A h A t E h V h V	inchoring System(s) - (anchor, lines, floats) inchoring System(s)- Shoreside loom - B3 (River Boom) or equivalent 'ac Truck or Skimmer and Storage Vorkboat(s) - of adequate size for type and amo	unt of boom
		Recommendation	nded Eq h A h A t E h V h V h V nded Per	inchoring System(s) - (anchor, lines, floats) inchoring System(s)- Shoreside loom - B3 (River Boom) or equivalent 'ac Truck or Skimmer and Storage Vorkboat(s) - of adequate size for type and amo	unt of boom

----- Secon 🔺 Northands

Assher?ort 🚯 stoping.Area
 E CulvetEbat

C Finite Point 😗 Response Strategy 📕 Underford Lam

S Hartseler Sawees | Borticta

🗢 Teta

APPENDIX 4A

Source Earl

485

*

240

OCTOBER 2015 CLARK, COWLITZ, SW LEWIS GRP Cowlitz River at north end of Gerhart Gardens Park **CWLZR-1.65** and The ... CWLZR-1 65 Juncture. CWLZR-1.65 Photo: Photo taken from river right looking East Bair Laundh C Rostanios Strangy Thender Beat Sources: Esn. HERE. Austor Peiel (S) Gaging Area Culori De M 63 1.000 Dante Preint E Indettexbas Responser Sinalegy **Driving Directions** Site Contact 1. From Kalama, take I-5 N City of Longview 2. At exit 36 take ramp on the right to WA432 W toward WA4/Longview/Long Beach (0.19 miles) Municipality (County/City) : Parks and Recreation 3. At fork keep left on WA432 W toward WA4/Longview/Long Beach (0.3 miles) 2920 Douglas Street 4. Continue on WA-432 (0.78 miles) Longview, WA 98632 5. Take ramp toward Dike Road (0.2 miles) 360-442-5400 6. Turn right on Tennant Way (Tennant Way Frontage Rd) 0.09 miles) 7. Turn left on Freedom Rd (0.5 miles) Nearest Address 8. Turn right into parking lot. 200 Freedom Way Longview, WA 98632

Chapter 6 – Resources at Risk

- Natural Resources at Risk Summary (T&E, birds, mammals, fish, shellfish, amphibians, plants)
- General Natural Resource Concerns (habitat, fish, shellfish, wildlife)
- Specific Areas of Concern (descriptions & maps showing those areas)
- Cultural Resources at Risk Summary (no site specific information, discovery requirements)

• Economic Resources at Risk Summary (critical infrastructure, commercial & recreational water dependent resources)

CONT	CONLISE SWILLING CRP	Ocrossk 2013
	CHAPTEI	16
	RESOURCES A	r Risk
6.1	CHAPTER INTRODUCTION	
Walk Iseatic cultur human can be	Ingite provider a commonly of network enhanced and agreen areas. It provides prevent information in the area in the areas where a similar matural ensemble and information. Until include fraudational prove-during indications of their advalled fraudational providence in blanch prevention. General Information should be fraudational the end of this shappent. A last of recom- int agreement.	durat, fiels, and widdlife resources, and oncerns exist. It offers a summary of the the discovery of cultural artificts and permetricitions, horing, and effect wildlife
charts	ingtor a purposely broad in scope and should not the resource provided in this chapter are limited in er 4 (Response Strategies and Priorities). Addition etc., state, tribul, and local government agreement kered.	ecouse they could not be addressed in all information from private organizations
The at	formation provided in this chapter can be used in	
2	According the Environmental Unit (EU) and Oper strategies beyond those bound in Chapter 4.	stone in developing additional response
•	Providing trainance abortak "context" to respond rotal phase of a spill response in the GRP area.	
	Betering responders and incident command stall resource concerns in the GRP area.	(that may by unbanding with scenarios
	Providing lackground information for personne public nativach during a spill moders.	linvolved in media powertations and
6.2	NATURAL RESOURCES AT RISK SUMMAR	ι¥
anima society	indeginal communities are superpible to the effect as and marris grannels in articular, and holy both in and larger actionic, such as thick, samphilaton as of converting theories, are all a potentially at role from it long terms effects that may recall from being exp	n the ocean, microscopic plants and d reptiles, birds, maximals, and a wide a smothering, associations, and/or the



Information on Sensitive Resource Locations

(including and beyond locations that have response strategies developed)



6.2.3 Specific Geographic Areas of Concern - Maps and Descriptions

Cowlitz River (See: Figure 6-1)

- Lewis and Clark State Park: Boone Creek, a salmonid spawning stream, runs through the park and is tributary to Lacamas Creek. This 621-acre park is in one of the last major stands of old-growth forests in the state. Coniferous trees, streams, wetlands, dense vegetation, and wet prairie comprise the park environment along with a vast stand of rare old-growth forest.
- 2) Mouth of Blue Creek and vicinity (Cowlitz ~RM 42-47): Waterfowl concentration area. Cavity nesting Wood ducks and Mergansers in old river channels, beaver dams and flooded willow areas. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels.
- 3) Mouth of Olequa and Lacamas Creeks and vicinity (Cowlitz River ~RM 24.5 to RM 30): Pastures and emergent wetlands in the Cowlitz River floodplain and nearby ponds support regular large concentrations of wintering waterfowl, geese, and osprey nesting. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. Resident fish.
- 4) Toutle River (Cowlitz River ~RM 20/Toutle RM 3 to RM 4.5): Snag rich area used by Bald eagles. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels. Resident fish.
- 5) Arkansas, Delameter, and Whittle Creeks (Cowlitz River ~RM 17): Wetlands across from town of Castle Rock provide habitat for cavity nesting ducks. Emergent and scrub shrub wetlands and flood plains provide regular large concentrations of wintering waterfowl including Canada geese. Salmonid spawning stream and juvenile salmonid rearing habitat in off-river channels.
- 6) Pleasant Hill (Cowlitz River ~RM 8.5): An unnamed stream and associated wetland complex between I-5 and Pleasant Hill Road near the town of Lexington. Wood ducks and other cavity nesting ducks regularly inhabit these areas.



Figure 6-1: Specific geographic areas of concern within the Cowlitz River system

Listing of Economic Resources in Area

Appendix 6A – List of Economic Resources

Category	Resource	Location	Latitude	Longitude	Contact	Phone	Email
A1 - Drinking Water Intakes	Castle Rock Water Intakes	Cowlitz River - City of Castle Rock	46.33403	-122.93194	City of Castle Rock - Public Works	360-703-0167	
A1 - Drinking Water Intakes	Kalama Ranney Collector (Water Intakes)	Kalama River - City of Kalama	46.04361	-122.83902	City of Kalama - Public Works	360-673-3707	
A1 - Drinking Water Intakes	Kelso Ranney Collector	Cowlitz River - City of Kelso	46.14238	-122.91383	City of Kelso- Public Works	360-577-3360	
A1 - Drinking Water Intakes	Longview Water Intakes	Cowlitz River - City of Longview	46.15037	-122.91448	City of Longview - Stormwater	360-442-5299	
A1 - Drinking Water Intakes	Vader Water Intakes	Cowlitz River - City of Vader	46.40608	-122.93336	Lewis County - Public Works	360-740-1123	
A1 - Drinking Water Intakes	Woodland Ranney Collector	Lewis River - City of Woodland	45.91006	-122.73998	City of Woodland - Public Works	360-225-7999	
A2 - Energy/Power Generation Water	Mayfield Dam	Cowlitz River - Silver Creek, WA	46.502592	-122.58813	Tacoma Public Utilities	253-502-8530	
A2 - Energy/Power Generation Water	Merwin Dam	Lewis River - Ariel, WA	45.956807	-122.55577	Pacificorp	503-813-6078	
B6 - Fish Hatcheries	Coweeman River - Rearing Pond	Coweeman River - Kelso Area	46.15566	-122.78136	Coweeman Rearing Pond Manager	360-577-0602	
B6 - Fish Hatcheries	Cowlitz River Salmon and Trout	Cowlitz River - Salkum, WA	46.51134	-122.62946	WDFW - Cowlitz River Hatcheries	360-864-6135	



GRP Update & Development Process

- Identify and evaluate sensitive resource locations and determine if a strategy can be developed to protect it.
- Efforts and input from:
 - U.S. Coast Guard
 - U.S. Environmental Protection Agency
 - Other State and Federal Agencies
 - Tribal Governments
 - Local Governments
 - Response Organizations
 - Emergency Responders
 - Environmental Groups/NGOs
 - Persons that live, work, or play in the communities covered by the plans
- Goal is to update plans every 5 years.





Spill Event Happens During an Incoming Tide









....but long before the spill ever happened the sensitivity of Useless Bay was acknowledged by Ecology & others during the GRP update & development process





Useless Bay was visited during the GRP process to see if there might be something we could do to protect it if there was ever an oil spill in the area.





Based on the results of field work (& established criteria), two sites for Useless Bay were developed into GRP response strategy locations (AI-29 & AI-30)



Detailed 2-Page Response Strategy Information Sheets were created for both sites so Contractors knew where to go, what to bring, and what to do when they got there.

Position - Location:	46' 6.450', -122' 53.414'	46' 6' 27.0", -122' 53' 24.8"	46.10730, -122.89028	Kelso		
Strategy Objective:	Collection : Collect oil moving ups	dream on Coulitz River duting per	ed of rising tide; deflect away from mouth	on outgoing tide.		
http://www.tation;	between RR & Tailey Way Bridges. E Extend remaining boom out into Co	Extend boom under RR Bridge & se writz River & downstream towards additional anchoring systems as ne	"66.10776, -122.86965; Coweeman lliver - cure to bank on north side of Coweeman n Hwy 432 Bridge & Point C; adjust boom or ede to keep boom secure in river. If site o & Tolloy Way.	ear mouth (Point B). gles and anchor as you		
Staging Area:	Onsite: Stage equipment in gravel	let.				
site safety:	Slips, Trips, Falk; Water Harand; Ve	getation.				
Field Notes:	Stage on dirt/gravel road between R	N & Talley Way Bridges, Launch Bo	at from BL-CWLZR-1,6.	n	liver at the mouth of the Cow	verman River C
Watercourse	River - Cowlitz River					
Resources at Risk:	Freshwater Wildlife, Salmon (Coho,	Chinook and Chumi, Steelhead			and the second s	
	1	3 Each 3 Each 402 Feat 1 Each 1 Each Recommended	Anchoring System(s) - (anchor, lines, fibats) Anchoring System(s) - Shoresale Bateri - B3 (River Bloom) or optivalent Vas Truck or Sammer and Statuge of collection Workboat(s) - of adequate size far type and an Nersannel		Dic PROD THEM. TO PANIN MIRE SOON THE	
100		1 Boat Ope	ator			S Forder & Malante & Grand & G
	· · · · · · · · · · · · · · · · · · ·	2 Laborer				Driving Directions
Bis Jahan angina Garage	. E Caretted de Tar	1 Separation			ns Sama w Galised 2.	L. Sam Danne, and K. M. K. Schull Wanne, M. McGrangelang, Band (C. Manine), T. Theore (MI). M. K. Chill Wanne, M. K. Chiller, S. K. K. Schull Wann, K. Schull, M. Schull, M. Schull, M. K. Schull, M. Schull, M. Schull, M. Schull, M. Schull, M. Schull, M



Because of this, the response contractors knew about Useless Bay and were able to quickly put boom in place to protect sensitive natural resources in the area.







🗉 Wetlands 😡





```
Collection strategy
```

🖃 Boom 😡

C Location







- Response Strategy Implementation Priorities are set by Federal, State, and Tribal Trustees (ideally).
- Changes to priorities can be made by if aerial observations or spill trajectory modeling show that such changes are warranted.
- Not all sensitive resources can be protected. Limited by access, worker safety, geography, tides/currents, and potential to do more harm to a resource than good.
- GRPs don't represent the universe of everything that could, should, or would be done in a response to protect sensitive resources.



What the Updated Admiralty Inlet GRP will Provide

- Stand alone plan for Admiralty Inlet (no longer combined with Hood Canal); north of Hood Canal Bridge.
- Expansion of the number of GRP Response Strategies for Admiralty Inlet
- Detailed 2-Page tactical response strategy information sheets along with tabular/matrices information.
- Information sheets for critical notifications to resource owners.
- Potential Oil Spill Origin Points for Admiralty Inlet, and a listing of the response priorities table for each of those points will be included.
- Listing of Economic Resources in the area; including on/near water critical infrastructure, water dependent commercial areas, and water dependent recreational areas as appropriate.
- Updated narrative chapters/sections and GIS-based maps



Admiralty Inlet GRP Update - Timeline

- <u>May/June 2016</u> Pre-draft plan reviewed by Trustees. Initial response strategy priority tables (one for each potential oil spill origin point) populated through Trustee consensus.
- <u>June/July 2016</u> Draft plan published and available for public comment. GRP Workshop held. Public comment period will be at least 30 days.
- <u>August 2016</u> Pre-final plan developed. Changes to plan based on comments received. Additional field work/site evaluations may be required. Additional response strategies might be added to the plan if needed, based on comments received. Priority tables finalized. Final review by Ecology and U.S. Coast Guard Sector Puget Sound.
- <u>September/October 2016</u> Final Plan Published. Old plan removed/retired. Responsiveness Summary (for all public comments received) also published.



How You Can Help Us Help Admiralty Inlet

- Let us know about areas of special concern to you (something known by you but may not be known by others outside your communities)
- Review and provide comment on the Draft GRP (once released)
- Attend and help promote public participation at GRP workshop (Dates/locations to be decided prior to release of the draft Admiralty Inlet GRP)
- Open communication between Ecology, County, and Tribal Planners (so those who write emergency plans might all know and have met each other long before anything happens)
- Participate in oil spill drills when invited including drills that test the response strategies in the updated Admiralty Inlet GRP



<u>Max Gordon</u> Admiralty Inlet GRP Project 360-407-7238 <u>maxg461@ecy.wa.gov</u> GRPs@ecy.wa.gov

Washington Department of Ecology

Spills Program – GRPs PO Box 47600 Olympia, WA 98504-7600

More Information:

http://www.ecy.wa.gov/programs/spills/preparedness/GRP/index.html



Useful Links

Ecology's GRP Website:

http://www.ecy.wa.gov/programs/spills/preparedness/GRP/index.html

Ecology's Spills Story Map:

https://fortress.wa.gov/ecy/coastalatlas/storymaps/spills/spills_sm.html

Washington Coastal Atlas:

https://fortress.wa.gov/ecy/coastalatlas/

Oil Spills 101 <u>http://www.oilspills101.wa.gov/</u>

Northwest Area Contingency Plan (NWACP): http://www.rrtionwac.com/NWACP/Default.aspx

