
**HABITAT WORK GROUP
DECEMBER 9, 2011 MINUTES**

In attendance:

Bob Amrine, Lewis County Conservation District	Bruce Treichler, Citizen
Lee Napier, Grays Harbor County Lead Entity Coordinator	Larry Durham, Confederated Tribes of the Chehalis Reservation
Mark Swartout, Thurston County	Janet Strong, Chehalis River Basin Land Trust
Janel Spaulding, CBP Watershed Coordinator	Chris Conklin, Quinault Indian Nation
Bob Burkle, WDFW	Birdie Davenport, DNR
Eric Delvin, The Nature Conservancy	Tim Hume, HDR Engineering
Ann Weckback, Lewis County	Chad Wiseman, HDR Engineering
Chanele Holbrook-Shaw, Heernett Foundation	Matt Gray, HDR Engineering
Jamie Glasgow, Wild Fish Conservancy	Darrin Raines, Cosmopolis Community Development Director
Kathryn Moore, Outdoor Grants Manager, RCO	John Kliem and Debbie Holden, CCS

Bob Amrine, Chair, called the December, 2011 meeting of the Habitat Work Group to order.

AGENDA

Meeting location changed to Thurston CD, 2918 Ferguson St SW, Bldg 1, Suite A, Tumwater, WA 98512

1. Conceptual Project Presentations

City of Cosmopolis: Mill Creek Dam Removal

Matthew Gray, PE, HDR Engineering

Lewis County: Bunker Creek, Middle Fork Newaukum, Van Ornum Creek

Bob Amrine

Chehalis River Shoreline Restoration Project

Dillenbaugh Creek Project

Bob Burkle, WDFW

2. SRFB Cycle for 2012

3. Conceptual Project Form Update

CONCEPTUAL PROJECT PRESENTATIONS

MILL CREEK DAM REMOVAL

Tim Hume, HDR Engineering
Chad Wiseman, HDR Engineering
Matt Gray, HDR Engineering
Darrin Raines, Cosmopolis Community Development Director

The Mill Creek dam was breached by a landslide on November 12, 2008 and is currently inoperable. The conceptual project would:

- Remove remaining dam structure
- Remove/control invasive species
- Re-grade channel
- Re-vegetate creek/banks for protection from erosion.
- Install LWD to improve channel structure and habitat diversity
- Install streambed materials
- Restore floodplain and possibly off-channel habitat within project site
- Enhance existing park and trails system with educational opportunities

PowerPoint Presentation available at: <http://hwsconnect.ekosystem.us/Project/120/17416>

Group Discussion

This project will be similar to the Little Hoquiam River Dam Restoration Project of 2008: (<http://hwsconnect.ekosystem.us/Project/120/12326>)

The property is owned by the City of Cosmopolis and Weyerhaeuser. Creek has good spawning habitat. The dam is located in a 1.7 sq mi watershed currently managed as commercial timberland.

Mill Creek flows through a tide gate. Bob Burkle commented on the tide gate:

- › Built by Jeff Juel who has modifications for system
- › Lowered water 5' below ordinary waterline though it was originally designed to be 2' below
- › Can be adjusted, blocked open in summer when flooding isn't a problem to allow fish passage and to kill vegetation upstream

Mill Creek is difficult to access, has an intact riparian above the dam, is about 4 miles long (the dam sits at about the first mile from the mouth). The group suggested the project be phased to include the whole system from the tide gates to above the dam.

The HWG made several suggestions for additional funding. Kathryn Moore, Outdoor Grants Manager, RCO suggested that the City of Cosmopolis apply for a design only project the first year in order to set out the sequencing and cost of each phase.

BUNKER CREEK PROJECT

Bob Amrine
Lewis County Conservation District

This project was brought before the HWG last year. It involves removing a barrier be either moving or raising a road. The barrier is on a 60 acre site and is the highest ranking private culvert barrier in Lewis County. There are no fish blockages downstream of this project; the majority of upstream barriers have been replaced or removed in accordance with RMAP regulations leaving only 3 remaining barriers.

(View project on HWS: <http://hwsconnect.ekosystem.us/Project/120/17477>)

MIDDLE FORK NEWAUKUM PROJECT

Bob Amrine, Lewis County Conservation District

This project is a culvert removal on the Middle Fork of the Newaukum that will open up 3.9 miles of habitat to the next partial barrier.

(View project on HWS: <http://hwsconnect.ekosystem.us/Project/120/17478>)

VAN ORNUM CREEK PROJECT

Bob Amrine, Lewis County Conservation District

This is a culvert removal and riparian planting project located behind a dairy farm off Bunker Creek Road. Flooding has rerouted the channel around the culvert. Lewis County is interested in replacing an impassable culvert downstream of the project culvert which would open up a total of 1567 square meters of spawning habitat.

(View project on HWS: <http://hwsconnect.ekosystem.us/Project/120/17479>)

CHEHALIS RIVER SHORELINE RESTORATION

Bob Burkle, WDFW

Bob surveyed the Chehalis River in August, 2011. The outside temperature was 88° and river temperatures ranged from 62° on the Skookumchuck to 70° above the Skookumchuck where water was being withdrawn for agriculture and the golf course. Bob discussed the areas of good habitat and areas of poor habitat along the river as follows:

- Skookumchuck to Mellon Street, habitat is okay, buffer to cast shade. One revetment site from sewer treatment plant pipes.
- Above Mellon Street the entire left bank to SR 6 has no riparian, a lot of cattle access, and steep banks that are eroding.

- Near Airport Road there are cars in the system
- Airport removed large riparian area to improve site for pilots
- Upstream of airport to SR 6, cattle access, no riparian, bare mud banks (trampled), erosion, creosote piles
- Riverside Golf Club has armor/groins of concrete, rock, pipe, etc. and an area where clippings, branches and garbage is being dumped over the fence (knotweed problem)
- Upstream of the golf course water quality is improved and at SR 6 there is a nice riparian area with a lot of wood
- There are too many cows accessing the river, causing severe erosion, and contributing to high fecal coliform levels
- At Alexander Park the river has gravel and riffle and Bob couldn't motor any further upstream

Bob has prepared a detailed report on his findings and indicated where riparian plantings need to be made. He discussed several options for cattle fencing including living fences.

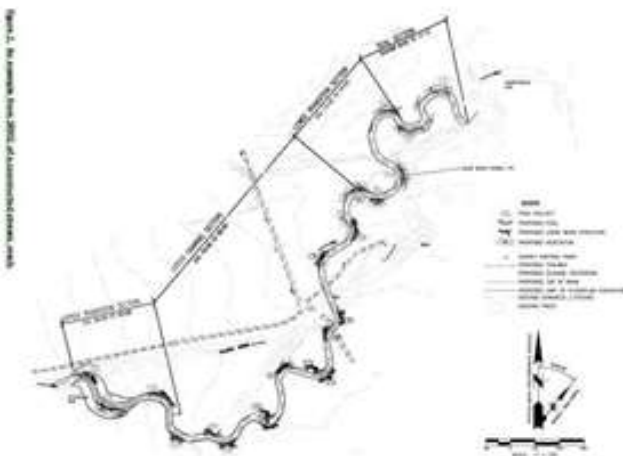
(View project on HWS: <http://hwsconnect.ekosystem.us/Project/120/16768>)

DILLENBAUGH CREEK

Bob Burkle, WDFW

This project involves rerouting Dillenbaugh Creek from a ditch near the freeway through Stan Headwall Park in Chehalis. This property is owned by DOT. The rerouted creek would move into a good riparian area and into the Newaukum River south of its current route.

Bob Amrine suggested a different route that might be easier to engineer.



(View project on HWS: <http://hwsconnect.ekosystem.us/Project/120/17384>)

SRFB CYCLE FOR 2012

Lee proposed that we cut off conceptual projects for the 2012 cycle in January or February and determine which projects the HWG would like to mentor. The project sponsors would then be invited back to meet with the HWG for mentoring sessions to build stronger projects.

CONCEPTUAL PROJECT FORM UPDATE

The Conceptual Project Form was updated to reflect a recent improvement to the HWS. The form is attached to these minutes and available online at the Chehalis Basin Lead Entity Website:

http://www.co.grays-harbor.wa.us/info/pub_svcs/Lead_Entity/hws/hws.htm

OTHER BUSINESS

Bob Burkle brought the draft Anchor QEA Fish study (mainstem from upper Chehalis to Porter RM33) for discussion. He expressed concern regarding the accuracy of the modeling used in the study. Bob will be discussing this with staff from ecology and Anchor QEA.

NEXT MEETING

January 12, 2012

CHEHALIS BASIN LEAD ENTITY CONCEPTUAL PROJECT FORM

Please provide as much information as you can. The highlighted sections are **mandatory**.

PROJECT INFORMATION		COMPLETE ALL MANDATORY HIGHLIGHTED SECTIONS
Project Name		
Category: restoration/acquisition/combined		
Start/End Date (i.e., 6/2012-6-2013)		(estimated)
Description		
Project Location (latitude/longitude)		
Project Contact (name, phone)		
Lead Entity Coordinator		Lee Napier, 360-249-4222
Photos and Documents		Please attach photographs, maps, supporting documents
Chehalis Basin Management Unit		
<p>(Management Units: Black River, Boistfort, Chehalis Mainstem, Cloquallum, Grays Harbor Estuary, Hoquiam-Wishkah, Humptulips, Lincoln Creek, Newaukum, Satsop, Skookumchuck, South Bay, Wynoochee River)</p>		

ACQUISITIONS / EASEMENTS / LEASES			
<input type="checkbox"/>	Nearshore or estuarine areas protected	<input type="checkbox"/>	Upland protected
<input type="checkbox"/>	Streambank or riparian protected	<input type="checkbox"/>	Wetland areas protected

ESTUARINE & NEARSHORE			
<input type="checkbox"/>	Beach nourishment	<input type="checkbox"/>	Large wood placement
<input type="checkbox"/>	Berm or Dike Removal or Modification	<input type="checkbox"/>	Overwater structure removal / modification
<input type="checkbox"/>	Channel modification/ creation	<input type="checkbox"/>	Physical exclusion
<input type="checkbox"/>	Contaminant removal and remediation	<input type="checkbox"/>	Pollution control
<input type="checkbox"/>	Culvert modification - culvert imp.	<input type="checkbox"/>	Reintroduction of native animals
<input type="checkbox"/>	Culvert modification – culvert removal	<input type="checkbox"/>	Revegetation
<input type="checkbox"/>	Culvert modification – culvert replacement	<input type="checkbox"/>	Shoreline armor removal or modification
<input type="checkbox"/>	Debris removal	<input type="checkbox"/>	Species habitat enhancement
<input type="checkbox"/>	Groin removal or modification	<input type="checkbox"/>	Substrate modification
<input type="checkbox"/>	Hydrological manipulation	<input type="checkbox"/>	Topography restoration or creation
<input type="checkbox"/>	Invasive species control	<input type="checkbox"/>	

FISH PASSAGE			
<input type="checkbox"/>	Bridge installed	<input type="checkbox"/>	Fishway chutes or pools installed
<input type="checkbox"/>	Culvert improvements / upgrades	<input type="checkbox"/>	Number of miles upstream made accessible
<input type="checkbox"/>	Culvert installed	<input type="checkbox"/>	Road-crossing removal
<input type="checkbox"/>	Fish ladder installed / improved	<input type="checkbox"/>	Rocked ford – road stream crossing
<input type="checkbox"/>	Fish passage blockages removed or altered	<input type="checkbox"/>	Square miles of streambed made accessible

FISH SCREEN	
	Fish screens installed or modified

FLOODPLAIN RESTORATION	
Channel connectivity / rehabilitation / creation – floodplain restoration	Site maintenance – floodplain restoration
	Wood Structures / Barriers # of Structures

INSTREAM FLOW		
Irrigation practice improvement	Water flow returned – stream	Water leased/purchased

INSTREAM HABITAT	
Beaver introduction	Channel structure – root wads
Channel reconfiguration and connectivity	Channel structure – wood structure / logjam
Channel structure – deflectors / barbs	Invasives weed control – instream
Channel structure – large woody debris	Number of LWD structures placed in channel
Channel structure – log weirs	Sediment reduction – sediment control
Channel structure – off-channel habitat	Streambank stabilization
Channel structure – rock weirs	

RIPARIAN HABITAT	
Conservation grazing management	Livestock exclusion
Fencing	Plant removal / control
Forestry practices / stand management	Planting
Livestock Water Development	Water gap development

UPLAND HABITAT	
Agriculture fencing	Road reconstruction
Agriculture management	Road relocation
Erosion control structures	Road stream crossing impr. (rocked ford)
Fencing	Slope stabilization
Invasives / weed control	Upland agriculture management
Planting	Upland livestock management
Road abandonment and obliteration	Vegetation / stand management
Road drainage system imp. / reconstruction	Water development

UPLAND WETLAND	
Invasives weed control – upland wetland	Wetland – restoration
Wetland – creation	Wetland upland – revegetation planting
Wetland – improvement / enhancement	

WATER QUALITY	
Nutrient enrichment – carcass analog (fish meal bricks)	Return flow cooling
Nutrient enrichment – carcass placement	Sewage clean-up
Nutrient enrichment – fertilizer	Toxin reduction
Refuse / debris removal	

WETLANDS	
Upland wetland – improve / enhance	Upland wetland creation
Upland wetland –invasives weed control	Wetland plant removal / control
Upland wetland –revegetation / planting	Wetland planting
Upland wetland – wetland restoration	

CURRENT PROJECTS STATUS	
Completed	Feasibility pending
Conceptual	Land acquisition completed
Construction completed	Monitoring
Design completed	Permitting Completed
Feasibility completed	Proposed

HABITAT TYPE	
Estuary (River Delta)	Nearshore (Rocky Coast)
Instream	Riparian
N/A	Rivers / Streams / Shorelines
Nearshore (Beaches)	Upland
Nearshore (Embayments)	Wetland

LIMITING FACTORS	
Biological Processes	Degraded habitat – stream substrate
Degraded habitat – channel structure and complexity	Degraded habitat – water quality
Degraded habitat – estuarine and nearshore marine	Estuarine and nearshore habitat
Degraded habitat – fish passage	Lake Habitat
Degraded habitat – floodplain connectivity / function	Non-habitat Limiting Factors
Degraded habitat – riparian areas / LWD recruitment	Unknown
Degraded habitat – stream flow	

NEARSHORE PROJECT		
Applying for ESRP funds (y/n)	ESRP (y/n)	PSNERP (y/n)

PRIMARY SPECIES BENEFITTING	
Bull Trout	Kokanee
Chinook	Pink
Chum	Rainbow
Coho	Sockeye
Cutthroat	Steelhead

PROJECT PHASE	
Construction	Land Protection
Design and Permitting	Monitoring and Adaptive Management
Feasibility	

SECONDARY SPECIES BENEFITTING			
	Anchovy		Marbled Murrelet
	Bald Eagle		Margined Sculpin
	Bull Trout (Secondary Spec.)		Mountain Sucker
	Cascade Torrent Salamander		Northern Leopard Frog
	Chinook (Secondary Species)		Olympic Mud Minnow
	Chum (Secondary Species)		Orca
	Coho (Secondary Species)		Oregon Spotted Frog
	Columbia Spotted Frog		Pacific Cod
	Cutthroat (Secondary Spec.)		Pacific Hake
	Dunn's Salamander		Pacific Harbor Porpoise
	Eulachon		Pacific Herring
	Lake Chub		Peregrine Falcon
	Larch Mountain Salamander		Pink (Secondary Species)
	Leopard Dace		Pygmy Whitefish
			River Lamprey
			Rockfish
			Rocky Mountain Tailed Frog
			Sand Lance
			Sea Otter
			Snowy Plover
			Sockeye (Secondary Species)
			Steelhead (Secondary Spec.)
			Steller Sea Lion
			Surf smelt
			Van Dyke's salamander
			Walleye Pollock
			Western Toad

REPORTING GROUPS			
	2009 Salmon Recovery Funding board		Number of Streams Water Typed
	Effectiveness Monitoring Project (y/n)		Shovel Ready
	Nearshore		Streams Water-Typed

ADDITIONAL PROJECT INFORMATION	
Goals and Objectives	
Budget, Funds, Expenses	
Property References	
Funding Source	
Partner	
Land Owner	
Project Manager	
Secondary Sponsor	