



July 9th, 2014

APPROVED Meeting Notes

Dungeness River Management Team

Dungeness River Audubon Center,
2151 W. Hendrickson Road / Sequim, WA

2:00 – 5:00 P.M.

Notes prepared by: *Melissa Coughlin*

Team Members/Alternates in Attendance:

Scott Chitwood, Jamestown S'Klallam Tribe
Shawn Hines, Jamestown S'Klallam Tribe (alt)
Sheila Roark Miller, Clallam County
Michele Canale, North Olympic Land Trust
Judy Larson, Protect the Peninsula's Future
Ben Smith, Water Users Association
Robert Beebe, Riverside Property Owner
Robert Brown, Dungeness Beach Association
Matt Heins, Estuary-Tidelands / Riverside Property Owner
Joe Holtrop, Clallam Conservation District
Jennifer Brown-Scott, Dungeness National Wildlife Refuge (alt)
Lorenz Sollmann, Dungeness National Wildlife Refuge

Tom Martin, Clallam PUD #1

Others in Attendance:

Robert Knapp, Jamestown S'Klallam Tribe
John Cambalik, Puget Sound Partnership
Jamie Michel, Coastal Watershed Institute
Ivan Stocker and Chief, Graysmarsh
Aaron Brooks, Jamestown S'Klallam Tribe
Cheryl Baumann, NOBLE
Phil Martin, Retired physicist, resident
Melissa Coughlin, DRMT Note-taker
Ann Soule, City of Sequim

2:00 P.M.

I. Introductions/Review Agenda/Review & Approve June 2014 DRMT Draft Meeting Notes

- Scott Chitwood welcomed members and attendees. Introductions all around. No changes were made to the July agenda. After reviewing the June DRMT notes, Shawn Hines noted she had made an edit to reflect comments from Robert Brown with regard to the marijuana grower near his home and statute on proximity to a public park (however it was on a page that didn't get printed for the review copies today). Sheila Roark Miller explained the State Liquor Board had a different definition of a "park" and allowed them a permit. Ben Smith moved to accept the June meeting notes with no other changes proposed; Robert Brown seconded the motion which was unanimously approved.

Public Comment

- Robert Brown wants to know any plans to assure the water meter readers are up, running, and providing data.
- Judy Larson said the NOVA series "Earth from Space" on PBS has been worthwhile; especially interesting was the discussion on satellite data-gathering over the last thirty years (record ocean dynamics and climate change concerns). Judy thought information on the program could be accessed at:
<http://www.pbs.org/wgbh/nova/earth/earth-from-space.html>.

II. DRMT Membership Changes

- Cynthia Nelson is now working for the WA Department of Health. She has been part of watershed planning in this area for a long time. Scott asked for ideas on how the DRMT can recognize her for her many years of service.
- Daniel Dafoe from the Department of Fish and Wildlife has retired.
- Scott Chitwood said he will contact those agencies regarding their replacement representatives for the DRMT, and asked group if there are any organizations that should be represented here that currently are not. Robert Brown noted that representatives from Riverside Property Owners are needed.
- Melissa Coughlin announced that this is her last meeting as the DRMT meeting note-taker (since late 2006).
- Scott reminded everyone that there will be no DRMT meeting in August 2014.

III. Dungeness Drift Cell Preliminary Prioritization – Robert Knapp, Jamestown S'Klallam Tribe

- Robert Knapp is a habitat restoration planner for the Jamestown S'Klallam Tribe. The Tribe and the North Olympic Land Trust are partnering in prioritizing areas for conservation of the Dungeness Drift Cell. The goals of this

project for the Tribe are: Conserve Dungeness Spit by: maintaining habitat forming processes; maintaining natural sediment delivery and transportation to the spit; conserving the sediment source.

- Robert described why the Dungeness Spit has been chosen for conservation: As the “Crown Jewel of the North Olympic Peninsula”; the Spit has economic, social, and cultural importance. Protects large amount of fish and wildlife habitat which is part of public, private, and tribal infrastructure. Judy asked about other partners on the project. Robert said NOLT received the grant, but they will also consult landowners and work with the Dungeness National Wildlife Refuge on this. Judy thought the Audubon Center and people with birding interests should also be included in discussions.
- To reach the goals: Incentivizing voluntary stewardship of these nature resources and natural processes (only works if it is in the landowner’s interest).
- Planning time frame is for the next 200 years; prioritize-based on greatest sediment delivery to the Spit over next 200 years. Unfortunately this is and will remain unknown. Finding substitutes (surrogates) for sediment delivery has been a challenge. Ultimately conserving the sediment supply for the entire Dungeness Drift Cell is the best way to assure the continued health of Dungeness Spit. Judy asked how source and sediment delivery are separated. Robert said both are close, but it is not always the case. They will never know what the most important spot is for the delivery of sediment to the Spit is, but there are ways to determine important spots. As part of pre-prioritization, the sediment from rivers and streams and from inside the Spit and from west of Morse Creek are not areas that will be discussed as part of the honing in process prior to prioritization.
- It was decided to use a common framework as well as not considering the stream/river sediment sources sediment sources within Dungeness Bay or points east or west of Morse Creek. Common language; drift cell miles; First & Second row parcels.
- The primary focus is on bluff sediments. Erosion of bluffs is what brings most of the sediment to the beaches. Erosion can be from wind, wave action, water (flowing over and down bluff) and gravity. The most important delivery spot can change over a short time frame. A long-term (200 years) perspective is needed.
- Robert explained that sediment can move either way once it hits the beach. At any instance sediment can move on-shore, off-shore, and in either direction along the beach. Ben Smith asked how fast is the Spit growing. Robert approximated 15’ a year.
- Applied the “river of sand” concept, using a naming convention similar to river miles to talk about the drift cells. Dungeness Spit is roughly 5 miles long. The transition from the Spit to the Wildlife Refuge and County Park finds increasingly higher bluffs around Morse Creek. After Morse Creek there are many alterations made by the railroad, including armoring and rip rap placement (one reason it was decided not to focus on this region). Feeder Bluffs have their own distinctions and are located in the selected area for prioritization.
- Selected parcels (to be further prioritized) from east of Morse Creek to west of McDonald Creek. This area is a likely area for erosion over the next 200 years. Have already removed public and private roads, along with some very small publicly owned parcels. Some very small privately owned parcels have been combined. Resulted in 382 parcels.
- Because sediment delivery to the Dungeness Spit over the next 200 years is unknown we can only base the prioritization on the things we do know that effect sediment delivery. Criteria: Physical, social, biological – some static, some ever changing. Definition: any factor that might affect the quantity and quality of sediment reaching the Dungeness Spit.
- Geophysical prioritization criteria: Bluff frontage (first row). Has the ability to deliver sediment now. Proximity to Dungeness Spit - Near to Spit = more delivery. Bluff Erosion rate. Calculates amount of sediment delivered to the beach.
- Implementation Parcel Prioritization Criteria: Size of property (combined area if multiple parcels are owned by same owner). Opportunity. Assumes undeveloped parcels will be easier to conserve. Immediacy of threat (armoring). Combines safety index, relocation potential, and concentration of residences. Cost effectiveness. Approximate value of property divided by the length of shoreline. [Note: Does not include landowner willingness to sell. This is an unknown and can change, sometimes quickly. Reminder- all conservation efforts will be voluntary!]
- Michele noted other partners in this project: in addition to NOLT, Clallam County, WDFW, Nature Conservancy, Trust for Public Land, and any organization that would be working in the drift cell. Landowner outreach will occur after the prioritization. Outreach will be based on options and corresponding actions. This doesn’t exactly fit with what NOLT currently does, as this includes small parcels with pricey homes. This is a proactive approach to help people make the right choices to protect property.

- Judy asked what efforts are listed in the Shoreline Master Plan to protect the “Crown Jewel”. Does the SMP properly address concerns and coordinate to preserve this resource. Judy also asked how many of the parcels selected are located at First Row. Robert K. guessed almost half.
- With regard to erosion rate data, Dave Parks has an approximate number for about 100 years (although it is based on one point of a survey). For data the Tribe has used air photos from about 60 years ago. Don’t know how it will change in the future, but this is the best information we have. Ball-park average erosion rate over time is one foot per year.
- Erosion Band and Parcel Geometry: 200 year “Erosion Band”. Rough estimate of area that will erode in the next 200 years. Percent of parcels are in 200 year erosion band.
- With regard to the volume of moving sediment, Robert K. said that Dave Parks has volumes of data of what is coming off the bluffs the last 10-11years.
- Robert Brown asked if the tax rate for homeowners that experience loss of property through erosion is reduced. Discussion ensued and Sheila Roark Miller suggested waiting for an SMP update.
- Matt Heins noted that the current mouth of the Dungeness River has only been in that location for 15 years; prior to that the Spit was fed from the inner Bay.
- Next steps:
 - Seeking comments on Draft Prioritization;
 - Missing Criteria;
 - Conservation Mechanisms;
 - Property Purchase, conservation easement, purchase of development rights, purchase of armoring rights;
 - Research Innovative new techniques;
 - Project Development.
- Phil Martin asked if SLR (sea level rise) is considered in the 200-year erosion band calculation. Robert K. said it may not have a huge impact, although it seems like erosion would speed up. It will also take more material to maintain and build the Dungeness Spit. John Cambalik said from climate change predictions the frequency and intensity of storms are more a concern along the Straits (rather than south Sound). When John asked, Dave Parks said there wasn’t enough wave data from buoys in the Strait to make connections yet (data gaps).
- Robert Brown has noticed sand bars developing in the waters by Dungeness Spit in the Bay. Robert Knapp said it seems like there is a lot more fine sediment in the Bay now; hope that sediment will be deposited in the floodplains with restoration efforts and dike setback.
- Judy asked how far sediment is traveling up the creeks mentioned. She thought that with development it would be likely there would be additional sediment. Robert K. said that in terms of volume they don’t know, but likely it is much smaller than you’d think; more study is needed.
- Robert Brown wanted more information on “Project Development”. Robert Knapp answered that this is the very early part of the prioritization; they will need to evaluate tools available; funding in grant for couple of projects (don’t know what this would look like) to see what project development entails. Michele Canale said the draft prioritization is done; it will stay in draft form with small iterations until the end of grant (June 2015). Hope to finish list of conservation mechanisms that might be applicable to the drift cell by September 15 (have RFP out for consultant). From mid-September through June, Michele will develop projects for consideration for grant funding (current grant enough for development of about four). Action Plan will be developed by December, from all the research on prioritization and conservation mechanisms.
- Ben Smith asked how much sediment is needed to maintain and grow the Spit. Robert K. said he didn’t know, but this natural process has gone away in other areas.
- Judy asked for the website with background information on Dungeness National Wildlife Refuge planning: <http://www.fws.gov/pacific/planning/main/docs/wa/docsdungeness.htm>

IV. Smolt Outmigration Update – Aaron Brooks, Jamestown S’Klallam Tribe

- Aaron Brooks is a fish biologist at the Jamestown S’Klallam Tribe and gave the “Eastern Strait of Juan De Fuca Smolt Trapping Summary 2013” PowerPoint presentation. He began by acknowledging and thanking all the land owners including representatives of the McDonald Creek Home Owners Association, Steve Johnson of Lazy J Tree Farm, Mark Burrowes, and owners of the Olympic Game Farm for allowing access to their properties for trapping operations. The project could not continue without their support.

- This project will produce population estimates of out-migrating smolts, estimate species specific migration timing, and analyze length and weight frequency distributions at each location. Objectives: Estimate juvenile salmonid production, migration timing, length and weight frequency distributions for the 5 sampled streams and aid in the collection of trap efficiency data for Coho and steelhead pertinent to a screw trap (fish are marked in Matriotti) in the Dungeness River operated by WDFW.
- Sites of the traps: on Siebert Creek, Bell Creek, McDonald Creek, Jimmy-come-lately Creek and Matrotti Creek (where the fish are marked at the WDFW screw trap). Matriotti Creek is a tributary of the river, while the others flow into the Strait of Juan de Fuca.
- Aaron discussed and showed pictures of site locations and went over the basic triangle design of the weir traps used, a fence weir consisting of panels with screens. Pictures of the actual traps on the different sites were shown.
- Sampling procedures: Count every species caught in the trap daily; Weigh and measure a subsample of Coho, Steelhead and Cutthroat caught at each trap; Clean each trap daily to avoid debris build-up on screens; Data expanded (based on average catch before blowout) to account for blow-outs and screen removal; Catch at all sites is assumed to be 100% of the abundance.
- Summary of 2013 season:

Species	2013 Cumulative Season				
	McDonald	JCL	Siebert	Matriotti	Bell
1+ Coho	12849	209	6999	8226	1170
Steelhead Smolts	3646	223	1354	388	44
Steelhead Parr	1009	210	2392	585	34
Cutthroat Smolts	135	110	222	347	463
Cutthroat Parr	6	2	19	43	67
Sculpin	9	38	2	366	134

- Aaron showed graphs based on species-specific, creek-based breakdown of smolt production estimates data and discussed findings.
- Basic points of 2013 study: 2013 was a record season at most trap sites. Possibility of some straying of fish either traveling upstream or through irrigation ditches. Streams actively used for rearing habitat. Matriotti Creek is utilized by 15% of the total wild Coho population and 4% of the wild Steelhead population in the Dungeness River in 2013 based on WDFW estimates. Migration timing less related to flow and more related to photoperiod and temperature
- Discussion: Monitoring of these streams is vital to understanding the migration patterns and abundance issues surrounding salmonids in each stream. The smolt traps are an efficient way to monitor all aspects of smolts and their life cycle. Smolt abundance can also be indicator of water quality issues and other various health concerns.
- For next study: Monitor temperature at all sites using tidbits; Conduct Benthic Index of Biotic Integrity (B-IBI) scoring (which is a quantitative method for determining and comparing the biological condition of streams) at each trap location; Conduct more spawner surveys in the fall (especially in streams not monitored now); Take more steps to avoid predation.
- Ann Soule asked Aaron to describe the spawner survey. Aaron said the creeks are walked weekly all winter and fish are visually identified. Redds and fish are counted for an estimate of spawning numbers. Judy asked about fish-trapping frequency now. Aaron said fish traps are checked daily from April - June; at the beginning it may take him three hours to check all traps; by the end of May it takes 6-7 hours to cover the same five traps. The fish in the box are counted and released. Fish measurements are taken twice a week; not daily. Species identification and counts are noted daily. There is potential for some mortality from trap, but great effort is made not to stress fish.
- Ann Soule noted the Bell Creek Cutthroat smolts are bigger, but they also appear earlier, which might indicate fish aren't coming from other streams but from Bell Creek where the habitat is good and has plentiful food sources.
- Cheryl Baumann asked if there were additional funds available, what would be requested for this project. Aaron said there is no access on Matriotti Creek; it would be great to put sonar out there to count fish to get spawning abundance data.
- After this meeting Ann Soule provided a link to a short film of a field trip with Aaron out to some of the traps:

❖ go to the Photo/Video Gallery on the City's Surface Water Management webpage: <http://www.sequimwa.gov/index.aspx?NID=559> “

V. Clallam-Cline-Dungeness Irrigation Flow Monitoring – Joe Holtrop, Clallam Conservation District

- Scott Chitwood asked Joe Holtrop to walk the group through the new Clallam Cline Dungeness irrigation flow monitoring website: <http://jesseg.nikola.com/cgi-bin/CCD/niscad.pl>
- Joe explained Parshall refers to where the original flume was for the outtake from the Dungeness River for all of Clallam, Cline and Dungeness. “Combo” on the page refers to Clallam and Cline portion of the water and Dungeness is Dungeness Irrigation. When values for Clallam-Cline and Dungeness are added they should equal Parshall value. The figures do not quite add up, maybe due to factors like the small lateral with no commercial users on the line. Scott pointed out that the Parshall value is equivalent to what you find on the DOE website's flow data on the other four outtakes: <https://fortress.wa.gov/ecy/wrx/wrx/flows/station.asp?sta=18A050#block2>
- Shawn Hines clarified that the Cline, Combo and Dungeness are the main ditches and the rest of the labels beneath “location” represent laterals. Joe said yes. He then showed maps to show the area boundaries for the irrigation ditches and companies.
- Robert Brown has neighbors with a pipe that isn't shown on the map. Joe said it may be a private pipeline. The Irrigation Companies/Districts manage surface connections.
- Shawn asked how monitoring devices are checked to determine the readings are measuring properly. Ben Smith said the Clallam-Cline is pressurized pipe, so there is no staff gage to compare. It must be double checked visually. The double check for all is a visual check.
- Robert Brown brought up the water storage concept (that had been previously discussed at a meeting) that stored water in pipes for times when needed. Joe said the original thought was the pipes would be full in the winter. There would be 15 miles of pipe full in the winter. Felt there may be too much risk with freezing pressure on risers along with other risks.

VI. Other Business/ Announcements

- Sheila Roark Miller reported on the status of the Carlsborg Sewer Project: Carlsborg Wastewater Facilities Plan which had been approved by WA DOE. Subsequently, after talks with representatives from the City of Sequim, the option of treatment in Sequim was reconsidered and chosen (rather than building a new treatment facility in Carlsborg). The updated plan is at the DOE (<http://www.clallam.net/PublicWorks/documents/CWFDraft2.pdf>) for review (expect to hear back in 1-2 months). Continue to work on other phases of the project: Determine connection costs, hook up costs, costs if property owner has to build out to connect, etc. over the next few months. Bob Martin, Public Works is working on the inter-local agreement with City of Sequim. Carlsborg Citizens Advisory Council meets August 12th – Question & Answer sheet will be available. County Commissioner McEntire will host an Open House. They are studying costs to determine County's financial contribution and that of property owners. Maintenance and operation costs will be estimated. Sheila has been working to include restrooms on the trail in the design. Judy asked when the public hearing on this is scheduled. Sheila answered that will be a long time away, after the facilities plan is approved. Judy asked about SEPA requirements now that sewage will be moved across river.
- Ben Smith reported on river flow situation. At the beginning of the year snow pack was low, and there was talk about a potential leasing program for water; but by March and April the pack was 88% of average. Nothing more in place for this year. Irrigators are watching the river and we will be close to limit and will start cutting back to meet commitment not to take more than 50% of flow. Robert Brown said looking at local weather – noticed snowpack disappearing quickly – best to get this work done sooner, rather than later.

Meeting adjourned at 5:00 P.M.

OPEN ACTIONS/TOPICS FOR FOLLOW-UP:

UPDATE ON DELTA FARMS – (FROM 4/13 MEETING REQUEST)
CANYON CREEK FISH LADDER STATUS FROM WDFW (TOPIC SUGGESTED AT 10/13 DRMT MEETING.)
UPDATE ON SURVEY WORK FROM ARMY CORPS OF ENGINEERS --- WHEN IT PROGRESSES FROM PLANNING STAGE). (TOPIC SUGGESTED 0/13 DRMT MTG.)
LIDAR MAPPING OF THE DUNGENESS WATERSHED (IN LIGHT OF RECENT MUDSLIDES) (TOPIC SUGGESTED AT APRIL 2014 MTG.)
PRESENTATION ON: PSP ACTION # 37: IMPLEMENT STREAM FLOW IMPROVEMENT PROJECTS WITHIN THE DUNGENESS PORTION OF THE ELWHA-DUNGENESS WATER RESOURCE INVENTORY AREA (WRIA 18)". LEADS: CLALLAM CONSERVATION DISTRICT AND WASHINGTON WATER TRUST. (TOPIC SUGGESTED AT APRIL 2014 MTG.)