

Dungeness River Management Team Meeting January 10, 2006

Notes prepared by: Melissa Coughlin

Team Members/Alternates in Attendance:

Steve Tharinger, Clallam County
Cathy Lear, (Alt) Clallam County
Judy Larson, Protect the Peninsula's Future
Scott Chitwood, Jamestown S'Klallam Tribe
Shawn Hines, (Alt) Jamestown S'Klallam Tribe
Lyn Muench, (Alt) Jamestown S'Klallam Tribe
Al Moore, Riverside Property Owners
Don Hatler, (Alt) Sport Fisheries
Randy Johnson, WDFW
Walt Blendermann, Sport Fisheries

Virginia Clark, Dungeness/Quilcene Planning
John Cambalik, PSAT and (Alt) WA Dept. of Ecology
Les Jones, (Alt) Dungeness/Quilcene Planning
Hansi Hals, (Alt) North Olympic Land Trust
Annette de Knijf, Dungeness National Wildlife Refuge
Pete Schroeder, Riverside Property Owners
Joe Holtrop, Clallam Conservation District
Jim Bay, City of Sequim
Scott Hagerty, (Alt) US Forest Service

Others in Attendance:

Welden Clark, Dungeness River Audubon Center
Jessica Colye, Graysmarsh
Dana Woodruff, Battelle Marine Sciences Laboratory
Tony Ingersoll, NASA Project
Jeff Ward, Battelle/NASA Project Researcher

Mark Wigmosta, Battelle/NASA Project Researcher
Patty Morris, NASA Grant Administrator
John Miller, Clallam County
Bob Boekelheide, Dungeness River Audubon Center
Melissa Coughlin, Independent Contractor
Bill Bullock, City of Sequim

2:05 PM Meeting Began

I. Introductions

- Introductions were conducted, including new representatives (paperwork pending): Judy Larson, new representative for Protect the Peninsula's Future replacing Tyler Ahlgren (Tyler Ahlgren will replace Eloise Kailin as alternate); Jim Bay, Director of Public Works, will be the new representative for City of Sequim, replacing John Beitzel (Dennis Lefevre will continue to be the City's alternate).
- Added to agenda: Tributary Ranking - opportunity available
- Approval of Minutes: December 13th meeting minutes reviewed; changes had been submitted prior to meeting; Virginia Clark moved to approve; Scott Chitwood seconded. Following a vote, the motion passed unanimously. Steve Tharinger noted that reviewing the notes prior to the meeting saved time

PUBLIC COMMENT: None at this time

II. USFS Updates – Scott Hagerty, USFS

- Forest service personnel have been very busy with damage from windstorms and flooding. Aerial recon is planned to assess storm damage
- Gold Creek: decommission of Pacific Trail (will connect to Olympic Discovery Trail): Completed 5 miles in Upper Gold Creek and Sleepy Hollow basins. Opened 5 miles of resident fish habitat. Currently lacking funds for final decommission segment above the Gold Creek slide; once funding obtained and work completed here, aquatic priority road decommission and road stabilization in upper Dungeness on National Forest system lands will have been accomplished; follow up bioengineering and re-vegetation work will be completed by Washington Conservation Corps crews in spring
- Collaborative Stewardship Program: group has identified following sites - one 69 acre 2nd growth timber stand (60-80 yrs old) near headwaters of Canyon Creek for commercial thinning. Receipts from thinning will be applied to identified restoration work in Slab Camp area. Working with various groups to decommission roads; Three roads have been identified in upper Caraco Creek area to benefit wildlife (forage seeding and planting for big game). Work to begin late summer and in 2008. Upper 2875 - other priority road for watershed (impacts from ORV use to wetlands, garbage dumping). Plan to decommission 3 miles of that road past Slab Camp trailhead, and rehab wetland and old campground. Action to be implemented in summer using Title II funding and stewardship funding

- Additionally, 2877-040 Road to have segment decommissioned across Upper Pats Creek – old stream crossing is failing. Will remove and stabilize
- Steve Tharinger began discussion on awareness of Collaborative Stewardship: Was a five-year program (last year of funding is end of this fiscal year); not in next year's budget - \$90,000 in county road projects going away. Lobbying in D.C. to reinstate program; important for compensating restoration activities. Suggestion: Write letters! DRMT may be asked to write letter in future. Steve asked if there are dollars available now?
- Scott Hagerty replied that there is funding for stewardship planning effort. RAC decides and prioritizes proposals to fund (mainly road & fish projects). RAC is mix of local government agencies, recreation groups, industries, etc. which has provided quite a bit of money for restoration
- Steve Tharinger asked if there were maps showing improvements, road construction, etc.?
- Scott Hagerty said he could provide pictures or slide show for future meeting
- Steve Tharinger was concerned that people don't know about all the work going on; awareness of improvements needed
- Scott Hagerty noted that in the Slab Camp area, there is a second growth stand which may be able to provide wood for the Tribe's large woody debris project. There was also a blow down in Snow Creek area, which also may provide wood for the project.

John Miller was introduced at this time: New Community Development Director for Clallam County. "Been at the job a week and a half and love my job". Wants to join more citizens groups to find out what's going on in Clallam County

III. **On-Site Septic (OSS) Workgroup Update – John Cambalik and Hansi Hals (for Liz Maier)**

Liz Maier could not make the meeting, Hansi Hals and John Cambalik provided updates:

- Washington State Legislature has rule indicating that Clallam County (and counties throughout Puget Sound) must start on-site septic programs, in part to address water quality issues such as shellfish downgrades and other problems; Rule begins in July.
- County wide minimum requirements: gravity septic systems must be inspected every 3 years and pump systems inspected each year
- Marine and sensitive areas need to be identified
- County, Tribes, DRMT, and others have formed group (On-Site Septic (OSS) Workgroup) to make recommendations that ultimately go to Board of Health (agency driving the effort). Board of Health will take and adopt in sections. Discuss topics like who will perform inspections: private or professionals? Judy Larson mentioned the OSS workgroup meets every two weeks – in the Commissioner's Room in the Port Angeles Courthouse – next meeting 1/22: 6 P.M. – 8 P.M.
- John Cambalik: Rule focuses on five areas: (1) Database enhancements; (2) Inventory of identified sensitive areas leading to the identification of marine recovery areas; (3) Operation and maintenance of identified sensitive areas; (4) Education of public and professionals. (5) Strategy will be developed to identify and fix septic problems by 2012
- Funding sources for accomplishing the five tasks not clear. Budget will be submitted to legislature. Won't have answer until April. Shorebank may tack loan program to homeowner mortgages. Local match or local district to help fund
- Steve Tharinger agreed it is an expensive undertaking, but he had recently spoken to Janine Reed (County OSS Specialist) who assured him that some of the more problematic septic systems have been fixed, with on-going maintenance programs in place
- John Cambalik to take Terry Hull's place on OSS Workgroup (Terry moving to Shorebank with focus on Hood Canal)
- Some discussion began on frequency of inspection and septic pumping / amount of people in household, and other contributing factors

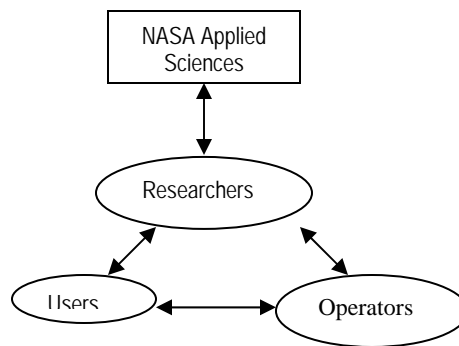
IV. **NASA Project – Tony Ingersoll, RD&C Coordinator, Jeff Ward & Mark Wigmosta, Batelle/NASA Project Researchers***

Cathy Lear introduced Jeff Ward, project manager and Mark Wigmosta, in charge of modeling task, employed by Batelle in Richmond

- Program started with a proposal for a "Solution Network" which was approved

- Outcome: model to predict available water, and a network of communication – with DRMT member’s feedback to contribute to tool development.
- “news we can use”: NASA science applicable to Dungeness watershed
- Project milestones:
 - Proposal submitted Fall 2005
 - Proposal accepted Spring 2006
 - Proposal funded Fall 2006
 - Performance Fall 2006 – Fall 2009
 - Funding \$1.6 Million
- Goal: Improve scientific basis of water management decision by developing a Hybrid Hydrological Model for Dungeness watershed
- Identify Key Characteristics of Solution Network that will enable sustainable use of NASA research products
- Bring findings to other watersheds and RC&D councils in United States
- Education, outreach and public involvement are crucial components

RC&D Based Watershed Solutions Network



<u>Users</u>
NOP RC & D
NARDCDC
DRMT
NPS
<u>Researchers</u>
NASA
PNWRC
PNNL
INL
NPS, PC
<u>Operators</u>
NCCS (National Water & Climate Control)
PC
NPS

*See Acronym List page 5

- DRMT Role: Create committee to identify measures for evaluating performance of the Hybrid Model, product works to derive better answers, reporting for Solutions Network
- Two types of predicting with models: Associative modeling: where you require past performance data to predict future events (as in financial consultation, some business models); Mechanical modeling: A complete understanding of how a system functions, this allows for the prediction of future events (used in biomedical research, process chemistry, groundwater transport)
- Current water prediction process uses statistic approach – NRCS seasonal volumetric forecasts since 1972. Statistical relations based on historical data measured meteorology, snowpack, streamflow which can be used to predict future streamflow volumes
- Broken into forecast periods (1) April-July and April-September (2) May-July and May-September (3) June-July and July-September; total available water volume may be predicted on average
- Goal of the Hybrid Model: Daily streamflow forecasts that consider the uncertainty in future meteorological conditions (peak flows, low flows, flow duration and frequency)
- Investigate linkage of Hybrid Model w/MODFLOW groundwater model
- NASA Hybrid Model application: Real time measurements of streamflow, remotely sensed snow cover, SNOTEL -> used to generate field of what can happen
- Ensemble of climatic forecasts, of streamflow forecasts, of hydrometeor logical forecasts to capture the uncertainty of inability to forecast. Capitalize on these measurements for statistical analysis
- Pete Schroeder asked if project leads were familiar with model VORTEX used in biological and endangered species prediction and extinction, which can run any number of iterations (Jeff Ward wasn’t familiar with VORTEX)
- Scott Hagerty asked how much information and the calibration for local watershed data goes into this model – Jeff Ward answered: air temperature, precipitation, satellite-based snow cover

measurements, Dungeness US gauge calibrations to measure performance of water. Tool will enable finer detail to predict water availability

- Next Steps: Subcommittee formation; Collaboration with Solution Network Team; Finalize Specifics of Model; Schedule periodic meetings: Biweekly teleconference & quarterly live meetings
- Steve Tharinger asked for people who would be interested in populating subcommittee:
 - Walt Blendermann, Jim Bay, Scott Chitwood, Welden Clark, Cathy Lear, Pete Schroeder, Al Moore, Mike Jeldness, Cynthia Nelson volunteered (or were volunteered in their absence). Subcommittee to report updates to DRMT in couple of months
- Patty Morris (NASA Grant Administrator) asked that volunteer's time be tracked

V. Department of Ecology Water Standards – Lyn Muench, Jamestown S'Klallam Tribe

- Water standards revised by Washington State. Background: 13 years ago the Department of Ecology decided to abandon and replace the numeric water quality standards (which apply to water bodies) with classes assigned to signify series of standards based on uses. "AA" was the highest standard. Everything on the Peninsula was rated "AA", except the Dungeness River, which was classified "A" – probably irrigation water disqualified it from an "AA" rating, although it was not based on any water quality data. The Rule came out in December 2006 and indicates that the water body must have the same rating as the water into which it empties. New standards were based on water support of the following uses: Aquatic; Recreational; Public Water Supply; Misc. A public process was begun which asked stakeholders for input on the standards. It took a long time for the citizens, Tribes, municipalities industries, etc. to come up with a set of standards. The state determined a single set of standards would apply to the entire state, not taking into account the challenges such as different oxygen levels and temperatures. The Department of Ecology needed to push through the standards to publish, noting corrections would be made at a later date. The Tribe particularly did not accept the standards as written (with inaccuracies) and worked with the EPA to reject the tables and standards
- Refer to handout of Table 602 from "Water Quality Standards for Surface Waters of the State of Washington, Chapter 173-201A WAC December 2006". The State did not actually look at the uses of each water body
- EPA will approve or disapprove set of standards after endangered species act review; it is possible they will reject it
- According to the Department of Ecology, as of December 20th, 2007 they will be enforcing the newer standards (any new TMDLs will have the new standards)

VI. Microbial Source Tracking (MST) Study Update – Dana Woodruff, Batelle Marine Science Lab

Update from Clean Water Group as part of the EPA targeted watershed grant:

- In 2003 the Tribe applied for TWA Grant; received award October 2004
- Conservation District, Clallam County, Battelle, Tribe working together to find sources of bacterial contamination in the Dungeness - specifically those that led to shellfish bed closures
- Not that simple to determine, as many suspects exist: hobby farms, pet waste, game farm, humans, etc.; began sampling and entering possible contaminate sources into database
- MST: Emerging science (research tool), methods of determining sources (i.e. host organisms) of fecal contamination of surface waters
- Selected ribotyping method: capable of differentiating specific species from sources
- Monthly fecal coliform monitoring (water sampling) from August, 2005 – January, 2008
- MST source sampling from August, 2006 – January, 2008 (extension on grant)
- MST sample site location map shows seasonal closure and perpetually closed spots
- 2006 Data collection consisted of five freshwater stations, two salt water stations, five samples per site, monthly; marine sampling includes water, sediment and wrack (eelgrass/detritus) sampling
- Total samples collected so far: 90 from seawater sources; 23 from marine sediment; 35 from wrack; 160 from freshwater sites. Collection of samples adhere to rigorous safety plan
- Examples of source sampling: August, 2006 Clallam County Fair; January, 2007 Batelle site; Game Farm; Wildlife Refuge; Raptor Center; Duck Club; Sequim Elk Herd
- Public outreach of project included a series of articles in the Peninsula Daily News in late spring

- Expected benefits: Determine predominant fecal coliform sources at key sites and identify temporal/seasonal patterns. Identification of sources that can be controlled -> implementation of mitigative measures resulting in long-term reduction of fecal coliform
- Expect to incorporate around 150 mammal and bird sources into database; the existing electronic library (database) maintains 90,000 species for typing- allows for specie-specific results
- After one year of source sampling and adding to database library, will conduct the matching. Would like to keep sampling longer -> Matching tests are done at one time due to costs.
- Walt Blendermann brought up concern about not analyzing for preliminary results and receiving findings as sampling is done; Steve Tharinger spoke to risk in using preliminary data without all the sampling completed; could lead to erroneous conclusions and actions from too little data. Lyn Muench voiced that action was being taken without the testing results – partners are working on controlling possible contaminants (e.g. faulty septic systems are being identified and fixed) and sources in environment. It was clarified that the samples are being analyzed by the laboratory upon receipt; it's the matching of the sources to the library that will occur after one year.
- Pete Schroeder brought up 2 events: (1) Breach in spit – extensive this year: Opened up December 15th and is still open - dilution factor in flushing bay- should change flow in bay at least for December; (2) Underground piping of irrigation system might reduce number of contaminants (animals dispensing fecal matter in ditches)
- Dana agreed both are part of the whole picture; may want to see pattern until December and note any changes, pieces of information to support what may be happening

VII. Announcements / other updates

- 2006 Attendance Records – Members reviewed 2006 attendance and were reminded of DRMT operating procedures state that corrective action must be taken if representatives miss 3 meetings;
- For 2007 DRMT Workplan, Steve Tharinger noted that Executive Committee discussed arranging monthly meeting based on topics (as a guideline); may not always be possible, but that is the goal
- Tributary Ranking Application: Executive Committee discussed application for \$40,000 to rank water flow and tributary – Tribe to research
- Shawn Hines passed around handout from John Cambalik: “Sound Health, Sound Future” Puget Sound Partnership Recommendations EXECUTIVE SUMMARY December, 2006

PUBLIC COMMENT

- Joe Holtrop announced 3rd phase of Clallam County Irrigation Project bid opened
- Tony Ingersoll announced there would be sandwiches, vegetable platter, fruit, and dessert for the people that could stay for the NASA Kickoff Meeting following adjournment of DRMT: More speakers and more presentations on the NASA project

Meeting Adjourned at 4:50 P.M.

Handouts:

- Lyn Muench handed out sections from Water Quality Standards for Surface Water of the State of Washington, Chapter 173-201A WAC (December 2006)
- DRMT Monthly Meeting Dates and Vice Chair Rotation January – December 2007
- 2006 DRMT Attendance Record
- “Sound Health, Sound Future” Puget Sound Partnership Recommendations EXECUTIVE SUMMARY December, 2006

***Acronyms:**

- NOP RC&D: The North Olympic Peninsula Resource Conservation & Development Council
- NASA: National Aeronautics and Space Administration
- PNWRC: Pacific Northwest Regional Collaboratory (NASA-funded)
- NRCS: USDA Natural Resources Conservation Service
- PNNL: Pacific Northwest National Laboratory
- INL: Idaho National Laboratory
- ONP: Olympic National Park
- NARC&DC: National Association of RC&D Councils in Washington, DC
- PC: Peninsula College