

Merrill, Hannah

From: Lear, Cathy
Sent: Thursday, September 01, 2011 12:50 PM
To: Merrill, Hannah
Subject: FW: smp characterization review - Anne Shaffer

Cathy
360.417.2361

Be patient: your best ideas are probably years ahead of their time.

- Kim Hightower

From: anne shaffer [mailto:anne.shaffer@coastalwatershedinstitute.org]
Sent: Thursday, August 25, 2011 11:23 AM
To: A. Stevenson byrnejb@dfw.wa.gov; 'The Muenches'; 'Shirley Nixon'; Lear, Cathy; B. Vreeland
Cc: 'josey paul'; 'DAVIDPARKS'; jste461@ecy.wa.gov
Subject: smp characterization review

Hi Cathy,

Here are my comments on the SMP characterization for file. I'm providing these from my Clallam mrc hat (since so much of the information was generated over the course of over a decade plus partnership with the MRC). My volunteer hours on this review total 8 hours. Thank you for the opportunity to review it-don't hesitate to contact me if I can provide any details.

The document itself is very professionally done w/ alot of good information, particularly at the larger (regional) scale. It includes alot of information from PSNERP. Unfortunately, the authors completely omitted all Clallam specific resource concerns (non-point pollution, conversions, non-permitted development, enforcement, and water withdrawals and volume, and non-point water quantity). They also omitted Clallam specific data generated by the Clallam Marine Resources Committee and NOPL nearshore assessments-most information they cited was 1994 or earlier (??). **We a wealthy set of information-including much that is published-that was specifically collected for inclusion in the SMP.** Also, lower rivers-a well documented element of the nearshore-are completely omitted from the reach analysis; and avoidance measures are completely lacking. They provided little/no restoration or protection recommendations. All recommendations for development were 'soft armoring' instead of move back/AVOID. The documents appears to favor engineering actions to preservation and protection of our existing critical shoreline habitats. There is no discussion of the major issues facing the county from conversions, unpermitted well drilling and development, and inadequate enforcement.

The characterization also incorrectly promotes the 'green is pristine' paradigm-and the adage that 'relative to Puget Sound' Clallam County is in good shape. Both of these are inaccurate representations from PSNERP. Again,PSNERP is, as PSNERP is the first to admit, NOT the appropriate tool for a detailed reach characterization and analysis. PSNERP was designed to identify basin wide process scale restoration projects, not reach specific shoreline management recommendations. The characterization needs to be revised to include existing CLALLAM specific information and appropriate relevant recommendations that are in this existing information.

Details (source after - at the end of each item)...

For the characterization...The authors need to add alot more Clallam nearshore and reach specific fish use information including:

1. Forage fish spawning (for example, they completely missed Dungeness Bluffs). This information is available thru the Clallam MRC and NOBLE reports available online;
2. The report must include all the forage forage fish migration information we have collected over a decade (missed eulachon, and forage fish kelp bed use)- published information and again, Clallam MRC reports;
3. The report must, but currently doesn't, include the yoy ESA listed Columbia river Chinook use of central and western Strait nearshore? –again in the NOBLE nearshore assessment report.
4. The characterization needs to add more reach specific physical processes (completely MISSED Twins private property ownership, including the mine (?),-this information is in the PSNERP (!) and NOBLE nearshore assessment report;
5. The document must include non-point water quality as a dominant concern for development, and macroalgae blooms as a concern for Dung bay)-published and mrc report, and;
6. The document must include the published recommendation that feeder bluff feed RATE is as important as volume- NOBLE nearshore assessment report.-again all of these are included in the NOBLE nearshore assessment AND mrc annual reports.
- 7 The characterization must also- absolutely-
 - a. ADD avoidance and protection shoreline proscriptions,
 - b. ADD lower rivers as a nearshore landform to all the reach analysis and characterizations....
 - c. ADD/include a synopsis of restoration and protection priorities by reach analysis (currently lacking).
 - d. ADD a synopsis of the key threats to our shorelines-conversions, unpermitted development and well drilling ,and a woefully inadequate enforcement.
8. There are a number of significant inaccurate statement sprinkled throughout the document.

References for the work I've led that I know is relevant are listed below-I am sure there are many others...

Line by line review...

Introduction/Title page: The document authors, and their company affiliations, should be clearly stated.

Section 2;

2.13. Number of incorrect statements including in text and table 2.1.

Figure 2.3 is small, hard to read, and incorrect (for example the Makah reservation appears smaller than the Elwha?)

This section should include a discussion on current conversions, unpermitted well drilling and development (that are rampant) and enforcement (woefully inadequate) issues also.

2.8 and graphs-unoccupied, dividable is a meaningless and possibly misleading. This needs to be revamped, and address both conversions and unpermitted development.

Section 3. Forage fish and fish use information is incorrect. Lots of available information is missing here (including nearshore assessments funded by Clallam MRC and NOBLE). Elwha (Freshwater Bay), Crescent Bay, Clallam Bay all have forage fish spawning that should be included.

Pg 3.3. Overland flow is a contributor (significant) to erosion particularly when vegetation is removed.

Only Johannessen and Shipman references are cited-much more existing work done locally that should be included here (see Dave Parks, DNR for information).

Pg 3.7. Schenger et al 2010. This doesn't take into account hwy 112 and it's disruption to sediment transport (which is significant). The authors assume 'if it's green, it's ok'-it's NOT.

Figure 3.5. Uninformative

Figure 3.6. Incorrect

Pg 3.18. Parks et al have documented high seasonal variation in erosion and state that the RATE of feed is as important as the volume of feed in our feeder bluff systems. This is included in the NOBLE nearshore assessment executive summary also.

p. 3.29. Incorrect statement and table doesn't match

pg 3.31. Need to reference more recent information here.

Section 4. P.g 4.13. Macroalgae blooms and impact to shellfish and forage fish spawning habitat are important. Also must add forage fish spawning along feeder bluffs documented for Dungeness feeder bluffs (nope nearshore assessment)

AVOIDING/NOT building in these shoreline areas should be the NUMBER ONE recommendation here.

Pg 4.23 Crescent Bay-Low point ,incorrect statement: need to include wetland at Salt creek estuary, and recommendation to restore the estuary and preservation of this estuary.

P. 4.10.Twins. Completely omitted the Lafarge mine? This need to be included in both the ownership and zoning discussions. The conclusion (most land is in commercial forestry so development risk is low) is incorrect-conversions in this area are a GIVEN.

Pg4.15. Clallam Bay. Need to include avoidance of development along this area as a top priority, and pulling back of existing armoring. Not promoting of soft armoring, which while a specialty of one of the -private consultant-report authors, is NOT a panacea and as our experience in so many areas has revealed, often fails.

Reach pages-All these pages need to include 1. preservation and restoration; and; 2.avoidance prescriptions. The Elwha and Crescent reaches needs to include estuary protection and restoration; Pysht photo figure is incorrect?

References/literature from projects specifically funded to provide information for/inform the SMP:

- Shaffer, J. A. M. Beirne, T. Ritchie, R. Paradis, D. Barry, and P. Crain. 2009. Fish use of the Elwha estuary and the role anthropogenic impacts to physical processes play in nearshore habitat function for fish. *Hydrobiologia* 636:179–190.
- Shaffer, J. A. P. Crain, T. Kassler, D. Penttila, and D. Barry, In review. The role scale and geomorphic habitat type play in nearshore habitat use by forage fish and juvenile salmon, ecological function, and implications for cross regional ecosystem restoration
- Shaffer, J.A, P. Crain, B. Winter, M. McHenry, C. Lear and T. Randle. 2008. Nearshore Restoration of the Elwha River Through Removal of the Elwha and Glines Canyon Dams: An Overview. *Northwest Science*. 82:48-58.
- Shaffer, J.A., T. Ritchie, P. Crain, M. Beirne, and C. Lear. 2008 Nearshore function of the central Strait of Juan de Fuca for juvenile fish, including Puget Sound Chinook salmon. http://hws.ekosystem.us/prun.aspx?p=Page_e7e0ad79-17d5-489b-9ed8-cb76f1f7c879&m=1&text=juan+de+fuca+nearshore&cols=2
- Norris, J, I. Ward, A. Shaffer and C. Lear 2007. Eelgrass mapping of the Elwha Nearshore. in Proceedings, Puget Sound Georgia Basin Conference , Puget Sound Water Quality Authority, Olympia Washington.
- Shaffer, J.A., D. Penttila, M. McHenry and D. Vilella. 2007. Observations of Eulachon, *Thaleichthys pacificus*, in the Elwha River, Olympic Peninsula, Washington. *Northwest Science*. 81(1):76-81
- Shaffer J.A., L. Ward, P. Crain, B. Winter, K. Fresh, and C. Lear. 2005. Elwha and Glines Canyon dam removals: nearshore restoration and salmon recovery of the central Strait of Juan de Fuca, in Proceedings, Puget Sound Research Conference 2005, Puget Sound Water Quality Action Team, Olympia Washington.
- Shaffer, J.A. 2004. Salmon in the Nearshore: What do we know and where do we go? A synthesis discussion concluding the all day special session entitled 'Salmon in the Nearshore' of the 2004 Pacific Estuarine Research Society (PERS). Available on line from the PERS webpage, <http://www.pers-erf.org/SalmonNearshoreFinal.pdf>
- Shaffer, J.A. 2004. Preferential use of nearshore kelp habitats by juvenile salmon and forage fish. In T.W. Droscher and D.A. Fraser (eds). Proceedings of the 2003 Georgia Basin/Puget Sound Research Conference. http://www.psat.wa.gov/03_proceedings/start.htm
- Shaffer, J.A. 2004. Water quality as a contemporary limiting factor to Olympia oyster (*Ostreola conchaphila*) restoration in Washington state. In T.W. Droscher and D.A. Fraser (eds). Proceedings of the 2003 Georgia Basin/Puget Sound Research Conference. http://www.psat.wa.gov/03_proceedings/start.htm
- Shaffer, J.A. 2002. Macroalgae blooms and nearshore habitat and resources of the Strait of Juan de Fuca. In: Proceeding, Puget Sound Research 2001. Puget Sound Water Quality Action Team, Olympia, Washington. http://www.psat.wa.gov/01_proceedings/start.htm
- Shaffer, J.A. 2001. Nearshore habitats of Clallam County: how we interact. In: workshop proceedings, Clallam County Marine Resources Committee. Clallam County, Port Angeles, Washington. <http://www.clallammrc.org>
- Shaffer, J.A. 2000. Seasonal variation in understory kelp bed habitats of the Strait of Juan de Fuca. *Journal of Coastal Research*. 16 (3) 768-775.

- Shaffer, J.A. and C. Burge. 1999. Ulvoid mats and shellfish of the Strait of Juan de Fuca: a pilot study. *Estuarine and Coastal Sciences Association Bulletin*. (32) 56-59.
- Shaffer, J.A. 1998. Kelp habitats of Inland Waters of Western Washington. Puget Sound Research 98. Puget Sound Watershed Action Team, Olympia, Washington.
- Shaffer, J. A., D. Doty, R. Buckley and J. West 1995. Community Composition and Trophic Use of Drift Vegetation Habitat by Juvenile Splitnose Rockfish, *Sebastes diploproa*. *Marine Ecology Progress Series*. 123 (1-3).
- Shaffer, J. A. and D. S. Parks 1994. Seasonal Variations in and Observations of Landslide Impacts on the Algal Composition of a Puget Sound Nearshore Kelp Forest. *Botanica Marina*. 37: 315-323.