

PSNERP-Nearshore Science Team (NST)

Monthly Meeting Synthesis

5-6 February 2008

Venue: Natural Resources Building, Room 175A, Olympia, Washington

Attendance: Si Simenstad (Chair; UW), Justin Boevers (UW), Megan Dethier (UW), Fred Goetz (USACE), Guy Gelfenbaum (USGS), Tom Leschine (UW); Tom Mumford (DOE), Hugh Shipman (DOE), Randy Shuman (METROKC), Curtis Tanner (USFWS)

Guests: Tim Quinn, George Wilhere and Randy Carmen (WDFW)

Primary Meeting Topics:

- Science Morning (in the Afternoon): "*The Prioritization of Conservation and Restoration Sites Using Marxan*" by Tim Quinn and George Wilhere (WDFW)
- Human dimensions of large-scale restoration
- Restore America's Estuaries 2008 meeting planning
- Future Without Project Working Group update
- Shorelines Armoring Working Group update
- Monitoring Working Group update
- CHIPS retreat review

Science Morning (in the Afternoon): "*The Prioritization of Conservation and Restoration Sites Using Marxan*" by Tim Quinn and George Wilhere (WDFW)

- Tim and George, senior scientists in WDFW Habitat Program, described their role in eco-regional assessment (EA); the EA encompassed seven WA ecoregions, conducted jointly with The Nature Conservancy; Washington Biodiversity Council adopted EAs for their conservation strategy in 2007
- Purposes of the assessment were to identify key places, set priorities, and provide information to guide decision-making, land acquisition, and county land use
- With goal of improved biodiversity, focusing on species and rare habitat types, and common habitat types, they developed site prioritization indices using a simple algorithm
- Marxan software was chosen as most common software for site prioritization with background in peer-reviewed literature; it uses "annealing" process that progressively improves itself, and includes an adjacency module; Marxan requires four inputs: (1) assessment units; (2) cost of conservation; (3) locations of elements; and (4) regional goals; it can also test robustness of assumptions
- Marxan balances "optimacity" of area vs. unsuitability index, identifying: (1) sites that must be protected no matter the cost; (2) some sites that are so costly, don't meet goals; and, (3) areas can start to show little distinction and not change
- Discussion points: (1) strategy must deal with site prioritization, e.g., smart site prioritization will incorporate regional efficiency; (2) uncertain how sole goal of biodiversity constrains process
- NST suggested maintaining an on-going discussion between NST and George to find the utility of Marxan for the NST's development of strategies and ways to implement conservation/preservation planning for nearshore ecosystems using the Change Analysis-Strategic Needs Assessment results

Human Dimensions of Large-Scale Restoration (Tom L. and Justin):

- Tom and Justin synopsis the literature supporting the need and approaches of human dimensions research about large-scale restoration; goals were to identify: (1) Where human dimensions fit into decision-making processes and organizational structure? (2) What levels of resources are invested in outreach and education? and, (3) How do they measure the use of outreach resources?
- Tom summarized findings from five major literature articles or reports (draft USGS report; Woolley et al.; Buckley and Haddad; Tuler and Krueger; and, Bright et al., and Justin summarized the attributes of three large-scale restoration programs (South Bay Salt Pond program in San Francisco Bay; Coastal Wetland Planning, Protection and Restoration Act in Louisiana, and Chesapeake Bay)
- Tom and Justin will assemble a group design, prepare advocacy paper and design a human dimensions survey applicable to PSNERP

Restore America's Estuaries 2008 Meeting Planning (Curtis and Si):

- NST has submitted proposal for a series of three coffee houses that address three of the eight meeting themes; the proposal identified people for each panel, most of whom have accepted
- Poster proposal deadline was extended: Curtis will be submitting proposal for eight posters after a final review by authors
- If proposed involvement in RAE 2008 develops, PSNERP could have prominent position in this nationally significant meeting

Future Without Project Working Group update (Fred G.):

- FWOP WG received the final draft last Friday from UW Urban Ecology; it is available for individual NST reviews, but not an official (mandatory) request for coordinated NST review due to lack of time; after reviews, Marina Alberti will present findings to WG, IT, NST, and SC
- Review should be based on and confined to original scope of work; Fred will send the NST the scope that defined this phase that would be subject to review, describing what the report should and should not be (e.g., detailed storylines, interview methods, and summaries of driving forces)
- Comments (referenced to page #) due 3/1/08; Fred will consolidate commenting; Working Group meeting by March to evaluate review comments; NST members recommends that Work Group submit the report to peer review
- It is uncertain how the final product will be used in GI, where to we go from here, and what else needs to be done in future. The PMT still needs to decide if/how it would go into the GI, with a decision pending in April; NST expressed concern that if report doesn't include information on spatially explicit future nearshore change and modeling approaches, it will be difficult for the NST to make recommendations to the PMT

Shorelines Armoring Work (SAW) Group update (Guy and Hugh):

- SAW is planning 'State of the Science Workshop' to focus on Puget Sound beach types, sheltered shorelines; designed in two parts – 1st day open meeting and 2nd day technical with selected audience; primary goal is research and monitoring plan as demonstration for new Seahurst Park restoration: how to measure effects of seawalls, and demonstrate method to do multi-disciplinary monitoring
- Larger community is interested in SAW and SAW has ability to establish itself as leader in researching this issue but real concern over scope-creep
- NST observed that SAW has the ability to inform different parts of the GI, but it: (a) needs to be detailed in explaining the purpose of products that are research; (b) will face pressure to be relevant; and (c) will be in increasing demand by some outside of NST.

Monitoring Working Group update (Tom M.):

- By June, the Working Group will have prepared a draft monitoring and adaptive management plan for the GI; presently waiting for: (1) Ron Thom's (BMSL) revised contractual report; and (2) lessons learned from Justin's thesis project
- Some concern over emphasis on indicator development, as this will at least drive status and trends monitoring; but, if PSNERP can describe what programmatic (effectiveness) monitoring is, it will likely be used by PSP; final NST suggestion was to focus on monitoring for program (PSNERP GI), before worrying about all else that is happening in Puget Sound, but to coordinate where possible

USGS CHIPS Retreat review (Guy):

- Objectives of the January 29-31 retreat at Port Townsend were to bring together scientists and collaborators to share results, receive feedback (to USGS) and plan future directions
- Compared to last year, the leads did a better job with integration, and were particularly good at highlighting multi-disciplinary nature of project; the poster session worked well in that respect.
- Lingering issues were whether to open up this process, and the number/composition of participants
- NST recommended not to open it, in order to keep discussion level focused; but related that CHIPS should focus on management needs and applied science to priority management issues.