

Neskowin Coastal Hazards Committee

Minutes of Meeting November 9th, 2010

Members present: Residents: David Kraybill, Pete Owston, Charlie Walker, Leslie Gordon, Gale Ousele, Bill Busch. Support: Kristen Maze (Till. Co. Community Development), Tony Stein (State Parks), Laren Woolley, Mitch Rohse (consultant), (Patrick Corcoran (OR Sea Grant). Guests: Neil Marquis (Tsunami outreach coordinator), Miriah Russo (student)

Welcome and Approval of Minutes: Pat welcomed the group in Mark's absence. Minutes for October were approved. (And subsequently sent to Christi for posting on the NCA website <http://www.neskowincommunity.org/>)

Old Business: None.

Recent Developments: The erosion is occurring a few weeks early this year, but the beach is eroding in a manner similar to historic patterns. One property owner is exploring rip rapping their property on Verbina St. The beach access at Ravena St. has unraveled at the base. It would be difficult to get an emergency vehicle in and out. Repair of the beach access is a County responsibility. The County removed the log jam in front of the Hawk Creek Café. The winter forecast is for the strongest La Nina in 20-25 years. 1998-99 were La Nina years and caused considerable erosion. Part of this is because the angle of approach of the waves is more directly from the west during La Nina storms. Some observed that the periods between La Nina and El Nino seasons seem to be shortening.

Active Protection Sub-Committee: (Bill, Dave, Pete, Charlie, Tony, Guy, Bob) Dave submitted a written report and posted it to the Basecamp site for review. The Active Protection sub-committee reported that the US Army Corp of Engineers (USACE) has assigned a senior person, Laura Hicks, to meet with the Sub Committee. Send to Dave any thoughts or questions you have for the USACE. Tony reported on a conversation he had with John Marra about dune management plans (DMPs). John is formerly a DLCD coastal planner and was involved in the development of DMPs in Manzanita and Pacific City. He advised that all DMPs are different, newer ones are more detailed, but the ones he did in the late 1980s and early 1990s cost about \$40K. Douglas Gless of Schlicker and Associates was identified as a consultant who could meet with the group to think through how much of Neskowin to include in the plan, other scoping issues, and a cost estimate. The group asked the Active Protection sub-committee to follow-up with Douglas to schedule a meeting, and then invite the larger group to participate in the conversation. It was noted that Tom Horning is a geologist who is developing a DMP for Seaside. Tom does good work and may be cheaper. All were asked to think about possible sources of funding for a DMP. Tony submitted and posted to the Basecamp website a report summarizing the "off beach" options for active protection identified in the Western Carolina report. Soft stabilization approaches (including vegetation and dune grading) were identified along with modification of development and infrastructure (retrofit houses, elevate houses, elevate roads and bridges, modify bridge structure, and exploration of constructing a tide gate or dam. Several other options were delegated for consideration by the Land Use sub-committee and the broader NCHC. Bill informed the group of a Geological Society of America publication "America's most vulnerable coastal communities." Bill followed-up with calls to the author who is sending Bill some related papers that will be posted to Basecamp. (REMINDER TO BILL) In general, recommendations tended to shy away from engineering solutions. Bill B. suggested another publication by Cooper addressing the term "protection" and features a pro and con debate between Oren Pilke and a lobbyist over beach re-nourishment. (see AP report for citation) Dave noted that October's presentation by Jon Allan and Peter Ruggiero discussed wave overtopping during storms.

There are two kinds of overtopping: “breakers”, are waves coming over the top of the structure, versus “green water” that comes over without breaking.

From Jonathan Allan (DOGAMI): "Wave breaking occurs when waves become unstable either by exceeding a critical steepness and when they reach a water depth that approximately equals the height of the wave. For example, a 30ft wave will typically break in a water depth of ~30 ft (in reality wave breaking occurs in water depths that are little shallower than the wave height, but as a general rule the previous statement is OK). On the Oregon coast in a major storm, wave breaking will occur some distance from the shore (perhaps as much as a mile offshore during large events). The waves will reform as they continue to travel across the surfzone where they will break and reform and then break again eventually running up the beachface as swash (runup). Note the reformed waves are termed "bores". Wave overtopping occurs when the swash of the wave (i.e. the runup) combined with the elevation of the tide exceeds some critical elevation at the back of the beach e.g. the dune crest, riprap structure or sea wall crest. We can differentiate two types of overtopping: "green-water" overtopping and "splash" overtopping (there's a third which is spray overtopping that is the product of wind carrying wave splash over a feature. This latter type is less significant in terms of its potential impact--i.e. it is more of a nuisance). In general the two can be differentiated by the ratio of the runup over the structure crest elevation (note that in all cases, these values need to be in the same common vertical datum such as mean lower low water (MLLW)). If the runup over the structure crest is greater than 2, than you have green-water overtopping. If it is between 1 and 2, you have splash overtopping. In the majority of cases on the Oregon coast we deal with the latter, although green-water overtopping can still occur. An example of splash overtopping is provided in the attached photo from Neskowin during the January 5th, 2008 storm that led to the partial failure of the riprap at Neskowin. The cost to minimize or even prevent overtopping can become expensive since essentially you need to increase the crest elevation of the structure, which likely means increasing its bulk at the same time though this may not always be the case."

Continuous overtopping affects properties far east of the shore, and there were questions related to the ability of property owners to build up their rip rap or build walls behind it. Tony stated that State Parks jurisdiction is from the top of the rip rap and westward. Jurisdiction east of the top of the rip rap resides with State parks only if it is continuous with existing structures. Structures built east of State Parks jurisdiction is the County's jurisdiction. Existing structures would need to reapply for permission to expand their dimensions, and if granted, State parks jurisdiction would extend with the structure. Property owners wanting to build walls behind their rip rap would need to go through the County's development permit process including seeking comment from agencies and possibly a building permit. Homeowners Associations may have CCR's that apply. Maximum heights of structures are limited by obstructing the view of the ocean of the affected property owner and/or their neighbors. State Parks manages up to the statutory vegetation line even if private property extends into low water. The USACE and Division of State Lands has jurisdiction below the low tide line.

Land Use Sub Committee: (Gale, Kristen, Laren, Matt, Mitch) The Land Use sub-committee is developing a “matrix” of potential solutions, or Hazard Assessment Techniques (HATs), that incorporates ideas from both the Land Use and Active Protection sub committees. The intent of the matrix is to provide a “consistent, thorough, and transparent presentation of options to more empirically evaluate potential techniques.” The matrix presents HATs from both Active Protection and Land Use sub-committees by category, and provides a scaled scoring scheme to weigh various factors, or criteria. This is a way to show the public the reasoning behind the selection, or not, of any particular technique. Suggestions from the full group included an “n/a” category in the matrix for things like jetties that are not relevant. Another suggestion was to use more general, scoring language such as “low,” “medium,” and “high,”

instead of doing a full cost-benefit analysis on each technique. Charlie cautioned that the matrix can imply a level of objectivity that isn't there ("false accuracy"), based on the value judgments of the evaluators. One may, for example, value "effectiveness" over "cost" while another values cost as the most important criteria. It was underscored that residents are concerned about outcomes more than process. The Active Protection sub-committee will run their options through the matrix to try it out.

Neskowin Sub Plan and the Tillamook County Adaptation Plan: An illuminating conversation ensued about how to move forward on desired projects in Neskowin, and in particular, the relationship between the Neskowin Sub Plan and the County's Adaptation Plan. A basic review of the process was provided by Kristen. She stated that the visioning and public hearing process codified a local "community plan." The particular actions included in any community plan are implemented through standard county planning procedures within the context of the Tillamook County Comprehensive Plan. That plan has various categories of planning activities (residential building, open space, agriculture, etc.) Currently, the Tillamook County Comprehensive Plan does not have a fleshed-out category for coastal hazards to the extent and level the proposed Adaptation Plan will address coastal hazards. The County has contracted with Mitch (with support from DLCDC) to develop that coastal hazards "Adaptation Planning" category for inclusion into the County Comprehensive Plan. This Adaptation Plan element will provide the "planning framework" for communities within the county to use when they want to implement local projects. The Adaptation Plan will provide urban unincorporated communities and cities a framework to produce their own sub-plan specific to their coastal hazard issues. Projects in the approved sub-plan are thus sanctioned to move forward and receive funding. Note: this does not mean that projects in a sub-plan will be automatically funded by the County. It means that the proposed projects have "pre-jumped" through the hoops. This is attractive to outside funders (foundations, other government agencies, etc.) as they typically want to fund projects that are supported by local policy makers. A Neskowin community sub-plan, within the Hazards Adaptation Plan chapter of the Tillamook County Comprehensive Plan, shows potential funders that the community's proposed project is well vetted and in alignment with local ordinances and regulations. (Mitch asked the group to consider definition language for the terms "short-term" and "long-term," and "chronic" and "emergency" as they related to categorizing projects.)

Discussion focused on the nature of the Neskowin sub-plan. This will be a separate document from the Adaptation Plan. While a sub-plan draft will be authored by Mitch as part of his contract, the plan will be developed by leadership of the NCHC, vetted through the Neskowin CPAC (the formal body for Neskowin's input into the Comp Plan) and the broader community, and finally submitted for adoption into the Tillamook County Comprehensive Plan. It was affirmed that the scoring of potential projects using the matrix will be done locally through the NCHC and not the County. NCHC's high scoring projects will be refined by the NCHC, and then forwarded to the CPAC for broader community input. This official process will limit the broader community learning about potential projects still in development. (Note: it will not limit whatever NCHC members privately share with their neighbors.)

Implementation: (Mark, Guy, Charlie, Kristen) Mark was absent, but asked for discussion, amendment, and approval of the Implementation Plan. The group had general agreement that what was presented looked good. More work forthcoming on this item in December.

Communication: Bill announced that a new book of interest in coming out in March 2011. It is titled: "The Science of the Shoreline Beaches."

Neskowin White Paper: Miriah Russo, Oregon State University PhD candidate, met with NCHC resident members on Monday evening interviewed them on the “story of the NCHC” from their perspective. On Tuesday Miriah met with members from DLCD and State Parks. Other interviews are scheduled. The intent of the White Paper is to document the evolution of the NCHC from the perspective of the members. This is expected to be useful as a flexible document that can serve a variety of purposes including: as background piece for educating the community, a narrative element for grant proposals, vetted information to provide journalists to improve the accuracy of their stories, etc. The NCHC resident members instructed Miriah to tell the story in her own voice for objectivity. Drafts will be circulated in December.

Meeting Adjourned

Next Meeting:

December 14, 2010 / 9AM – 11:30 AM

Sitka Center