NATIVE USES OF WETLANDS AND NATURAL RESOURCES PLANNING: THE SWINOMISH INDIAN TRIBAL COMMUNITY'S WETLANDS CULTURAL ASSESSMENT

By Todd Mitchell

Introduction

Wetlands are defined based upon the presence of three essential characteristics: hydrophytic vegetation; hydric soils; and wetland hydrology. Wetland inventory and wetland habitat assessments are conducted in areas where wetlands need to be identified and ranked for regulatory protection measures. Typically the following methods are used: 1) identify wetlands through existing resources and produce a preliminary wetland inventory, 2) field verify wetlands, 3) assess wetland functions and values, and 4) develop watershed ranking. In order to evaluate and assess the relative importance or level to which a wetland performs a specific function, a functional assessment of the field-verified wetlands is conducted. Detailed scientific knowledge of wetland functions, sometimes known as functions and values, is often limited, so that evaluations of the functions of individual wetlands are qualitative and largely dependent upon professional judgment. Wetland functional valuations are still an evolving science. Therefore, better methods for valuations are being researched but until such methods are in general use by the scientific research community, the current and possibly inaccurate methods are in use.

In addition to the drawback of the subjectivity and broad based scientific approaches to wetland functions and valuation, cultural and socio-economic factors cannot be adequately addressed for wetlands important to tribes since cultural practices, as well as flora and fauna, vary regionally. Given this variation, cultural factors must be tailored in these assessments for each individual tribe to garner accurate functional values. In the absence of this individual tailoring, culturally important values may not be correctly integrated into wetland ranking and hence resource management and policy.

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The Swinomish Indian Tribal Community's Wetlands Cultural Assessment Project was initiated to develop an understanding of Swinomish cultural values of wetland systems. The Tribe found there was a need to determine Swinomish wetland cultural values since standard wetland inventory and functional assessment methods could not adequately identify wetland functions or uses related to Tribal cultural values. Staff identified that significant cultural functions were not adequately captured in the assessment of the wetland systems. The cultural assessment considerations were absent from the functional rating values and hence proposed regulatory and management policy would not adequately protect the wetlands in regards to Swinomish cultural values.

The Swinomish Indian Tribal Community's Wetlands Cultural Assessment Project was developed to produce a cultural resource assessment module that could be incorporated into the wetland assessment. In developing this module, local Native knowledge would be gathered about the traditional uses of native wetland vegetation and wildlife. With this traditional environmental knowledge incorporated into wetland assessments, we hope to reassess and revalue the wetlands on the Swinomish Reservation to better protect and preserve these wetlands for both cultural uses and ecological functionality.

Background

In 1999, the Swinomish Planning Office contracted a wetland specialist to conduct a wetland inventory of the Swinomish Reservation that included a wetland functional value assessment. All existing and potential wetlands were

identified from the National Wetlands Inventory, soil survey, existing delineations and maps, topographic survey, and aerial photographic interpretation. These wetlands were assigned preliminary U.S. Fish and Wildlife (Cowardin et al. 1979) and hydrogeomorphic method (Brinson 1993) classifications. All wetlands identified during the inventory meet the definition of a wetland consistent with the U.S.Army Corp of Engineers 1987 Wetlands Delineation Manual. Thirty -six of the identified wetlands were then field-verified and evaluated using a methodology developed by the U.S.A.C.E. (Reppert et al. 1979) and modified by Cooke (1996).

The following wetland functions and values were assessed: (1 flood and storm water control; (2 base flow and ground water support; (3 erosion and shoreline protection; (4 water quality improvement; (5 natural biological support; (6 overall habitat functions; (7 specific habitat functions; and (8 cultural and socioeconomic characteristics. Each category contains a series of questions that are scored 1 through 3 (or low, medium, and high). This semi-quantitative method assigns points based upon indicators of low, moderate, and high levels of functions. Points are totaled at the end of each section and divided by the total available points. The final score is represented as a percentage that can then be compared with other wetland scores throughout the Reservation.

The cultural-socio-economic section in this standard approach is made up of seven questions: educational opportunities; aesthetic value; commercial fisheries, agriculture, renewable resources; historical or archeological resources; passive and active recreational opportunities; land ownership; and nearness to adjacent open space. The cultural-socio-economic section does not take into account Tribal values such as historical, spiritual, ceremonial, subsistence, medicinal, or traditional values. With these missing values in mind, the Swinomish Planning Office was able to apply for and receive funding for a U.S. Environmental Protection Agency (EPA) Wetlands Development Program Grant in 2000. The objectives of the Cultural Assessment Project were: development of a functional value assessment for wetlands based on Swinomish cultural values, development of habitat data for all wetlands based on extensive plant and wildlife research in selected wetlands, and regulatory guidance that incorporates the cultural based functional values into wetland protection regulations and management policies adopted by the Tribe. The program strategy was broken into three phases, one for each objective:

- Phase One: Establish interview methodology and interview community elders and traditionalists to garner the expression of cultural values and obtain community information on the traditional uses of native wetland vegetation,
- Phase Two: Research information on native wildlife and habitat requirements that are associated with the wetland systems and develop a GIS map of culturally derived habitat zones as determined by the research and cross-referenced with existing wetland map and databases, and
- Phase Three: Incorporate findings into the assessment and regulatory guidance policy for Tribal wetland protection.

Methods

Phase One

The first phase of Swinomish wetland culture data development was started with a brainstorming session with two Tribal members and Tribal government employees, our Cultural Resources Liaison and Tribal Enrollment Officer, since they are well acquainted with the community and Tribal members. Our goal was to talk about Tribal members who could be hired to conduct the interviews and research as well as knowledgeable Tribal elders who should be interviewed. The Swinomish Tribal membership is about 1000 people total, with 1/3 of those living on or near the Reservation, and less than 50 of those being possible knowledgeable elders.

We decided that the hiring of an older Tribal member paired with a younger Tribal member to conduct the interviews would be the best way to reach the community. The older interviewer was chosen to be someone well known in the community and familiar with the elders and community members as well as having traditionalist parents and grandparents. It was hoped that the older interviewer would be able to set up interviews with community members in their homes. The younger interviewer was chosen because he was already working in the Swinomish Planning Office as a Water Quality technician and willing to work on this project. Successful gathering of Swinomish cultural knowledge can be limited by sending an anthropologist because the community traditionally is leery or suspicious of giving away too much cultural knowledge to an outside "expert." The trade off to choosing Tribal members as interviewers was getting more open dialogue and information but in limited scope due to the interviewers' lack of training.

The interviewers were not able to start interviews on the project until December 2001 due to conflicts with the spring and summer fishing seasons, but during this time wetland plant information was compiled from existing documents and testimony and presentation materials for the interviews were prepared. Our next task was to establish interview methods. The basic guidelines were to conduct interviews at a time and place convenient for the elders; interview the elders and gather uses of plants whether medicinal, ceremonial, or spiritual; tape record the information for later transcription; and summarize the findings. The interviewers were able to conduct ten interviews within a one-month period but they found it difficult to schedule the interviews since the winter is the season for traditional Smokehouse (spiritual) activities. As one Swinomish elder, Neah Martin, stated, "I'm busier now that I'm older than I ever was as a kid."

The original interviewers found that there were not many "oldtimers" who still knew about traditional plant uses. Many of the people they contacted for possible interviews said, "You should have done this work 10, 20 years ago

when my (older relatives) were still alive. They knew all about the plants and I don't, I'm too young (or didn't listen and learn these things when I was younger)." To continue the work, we hired a non-Tribal member native-plant specialist to conduct follow up and/or additional interviews, compile a list of traditional plants from the interviews and literature review, produce a report on the traditional plant use, and start collecting Swinomish wetland plants for production of an herbarium of pressed plants. The herbarium was started to use as a teaching tool for later use or as presentation materials for future interviews. Working part-time from June 2002 to March 2003, this specialist was able to complete a Traditional Uses of Wetland Plants report.

Phase Two

The second phase is habitat profiling of the Swinomish wetland systems. For this work, we hired a botanist to conduct a detailed botanical survey of eight targeted wetlands on the Reservation. Each wetland chosen for the survey was a different type of wetland as classified by the wetland inventory. The survey included percent cover of plants, inventory of all plants present, whether a plant was culturally significant (based on the Traditional Uses report), and a plant's wetland status or habitat. Surveys were conducted from May to June 2003, including completion of the Wetlands Botanical Survey report, and collection of all but a few plants from the plant inventory list. Development of a finished habitat profile is ongoing. In further work in this area, we hope to apply the knowledge gained of the diversity and abundance of culturally significant plants found the targeted wetland types and habitats to all wetlands of these specific types and habitats in order to map and identify wetlands or habitat zones that have actual or potential culturally significant plants for use in future assessment or protection.

Phase Three

The third phase is to develop a cultural assessment module that incorporates the cultural functional values and regulatory guidance. As part of separate but related work on a wetland protection ordinance, we were able to include policy language that indicated wetlands within the Reservation were to be ranked based on the Swinomish wetland ranking system. Recommendations for producing a Swinomish ranking system included consulting a wetlands specialist to determine what current methods are standard practices for assessing functional values and produce integrated culturally sensitive elements to assess the cultural component of wetland function. Alternatively, a standalone cultural values module could be incorporated into current ranking systems. Such a module would provide a quick way for us to re-evaluate wetland rankings by inserting the new cultural module into the 1999 wetland inventory functional assessment and re-scoring the wetland inventory functional value. This ranking could become the interim ranking until the new Swinomish wetland ranking system is established and implemented. For newly assessed wetlands, the old methods could apply with the addition of our cultural component.

In developing this cultural module, we would incorporate several ranking criteria into data forms and/or procedural checklists. These ranking criteria could include: number of plants that are used for medicinal purposes; number of plants used for food and the obtainment of food; past or present place of traditional harvesting; presence of known or potential archeological or historic sites; number of plants with past or present spiritual or ceremonial utilization; past or present spiritual or ceremonial utilization; number of native plants; and percent of wetland located on Tribal or Trust Land.

In using or creating this cultural ranking module, we are aware of the sensitive nature of the cultural information. Several options have been suggested to protect this information during the assessment and regulatory review processes. Tribal staff, rather than outside consultants, would perform the cultural ranking component of an overall wetland ranking, in a sense adding the cultural score to an existing or newly ranked wetland score. Another option would be to inform and educate the Swinomish Cultural Committee about wetland rankings and have the Committee rank the wetland. The Swinomish Cultural Committee deals with cultural issues of the Tribe and is made up of several members of the Swinomish Senate (the eleven-member elected governing body of the Tribe) and other Tribal members of distinguished cultural knowledge. If this is the preferred method, the Committee's involvement could take on varied levels of involvement ranging from full involvement (the Committee given all the pertinent ranking criteria information about a particular wetland and using the cultural module worksheet to add points to the overall score) to minimal involvement (the Committee could simply determine a wetland should be overall ranked high, medium or low and the appropriate number of points added to the score).

Discussion

Several of the project design considerations used in conducting this study were particularly effective in accomplishing project goals to date. The most effective interviewers were the Tribal members, and having an older interviewer (40's) paired with a younger interviewer (20's) worked well in this case. The interviewers, while not practicing traditionalists in the medicinal sense, did have either first or secondhand knowledge of plants that might have been used by their parents or grandparents. While not familiar with standard anthropological practices, the Tribal members were able to access a wide range of knowledgeable elders. Since the Swinomish Tribal membership is small and the relevant pool of potential interviewees was limited, the interviewers were able to determine appropriate people to interview either based on personal knowledge of the individuals or from information gathered talking to Tribal employees or family members. With their knowledge of the Tribal membership, they were able to interview several elders living off the Reservation.

The knowledge that is still retained by Swinomish elders is less primary practicing traditionalism but secondary. Many elder interviewees were chosen because their parents or grandparents were practicing traditionalists or medicine men. Dobe Tom, an Upper Skagit Tribal elder said, "I never paid no attention to those things I never thought important. My grandmother used to say, listen you might have to use [plant medicince] sometime. As a little boy… I lived with my grandmother. That is how come I know little a bit [about plants]." Given the interviewees' ages, even this information is becoming less and less accessible.

The interviewers began to elicit information and in many cases were able to just let the interviewees talk and reminisce with occasional prompting. Two interviews included two or more people and in both cases seemed to be a better method than individual interviews. In the 'group' interviews, all the interviewees played off each other, remembering or contributing more information than individual interviews may have. The seasonal timing of interviews also seemed particularly effective. Winter is the smokehouse season when most people are near home most of the time. Usually during the summer, people are gone to the regional powwows for indeterminate periods.

There were some aspects of the project that were not as efficient or effective as hoped. The interviewers found that the tape recorder setup was a bit intrusive given the large size of the tabletop, high quality microphone initially used. For the later interviews, we were able to switch to a lapel-type microphone that seemed to work better. Our interviewers, while approving of gathering and preserving this knowledge, were not committed to sticking it out and getting the interview portion of the project completely finished. Simplistically, the new traditionalism is related to maintaining the Smokehouse spirituality and fishing culture, and in many instances conflicts with modern work ethic or lunchbox mentality. While this traditionalism made them very effective interviewers, without personal commitment to the goals of the project it ultimately inhibited the process.

The major problem with the whole interview process was the loss of firsthand knowledge and a reliance on anecdotal information. In Swinomish, the influence of western culture is well over 150 years old and even secondhand information is becoming scarce as less traditional knowledge is passed from generation to generation and what is passed on is not being practiced. But even though most elder's sentiments were this work was too late in coming, Swinomish elder Ivan Willup said, "Things like what you guys are doing are a good thing…keeping [the culture] active…piece it all together and you'll have something." If you are interested in gathering this type of information, start now!

Conclusions

This project was created because the standard approach to wetland function valuations failed to address critical cultural issues related to wetlands. With continued work, we hope to develop a Swinomish-specific method for inventorying and assessing wetlands, ultimately leading to culturally sensitive and resource-protecting regulations. With our limited cultural sources, we continue to research archival testimony and interviews and hope to start another round of interviews focusing on younger Tribal members and their memory of traditional practices by their parents, grandparents and relatives. This project continues to be ongoing and we will incorporate new information into the cultural module as needed. We are fortunate that, as the Tribal government and regulatory authority, we are able to incorporate cultural values within our policies. While planning, as a municipal practice, is a very "western" activity, the Tribe is able to use and learn these practices in an adaptive regulatory strategy while maintaining its cultural heritage. We are also able to maintain a respect for these cultural practices and protect the information as the sources and knowledgeable elders deem appropriate, since ultimately, we are accountable to our constituents, the people we interviewed, our families, and the Tribal community.

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