Subject: Mitigation Process

Participants: Chuck Courtney; Thomas Ries; Lee Cook, Ann Hodgson

Summary: The EPC mitigation process is described in Rule 1-11.08. Currently, mitigation is considered only after avoidance and minimization of wetland impacts have been determined infeasible.

Issue: To evaluate the current mitigation process and discuss possible changes to streamline the program while keeping the integrity of wetlands protection.

- List and provide examples of other mitigation processes used by Federal, State or other local agencies that could serve as a model.

Federal:
1. The U. S. Army Corps of Engineers and Environmental Protection Agency implement the 404(b)(1) guidelines but a new rule will be effective in July 2008; see 33 CFR Parts 325 and 332 and 40CFR Part 230. These rules provide compensatory mitigation for losses of aquatic resources.
2. The USFWS has a ‘Mitigation Policy’ specifying a hierarchical approach to mitigation that the agency uses to make recommendations to permitting agencies [http://www.fws.gov/policy/501fw2.html February 24, 1993].

State:
1. The Florida Department of Environmental Protection implements the state Environmental Resource Permit (ERP) process, which includes mitigation options for wetland impacts, using UMAM or WRAP.
2. The water management districts implement the FDEP ERP process; a concern is that the use of and implementation of UMAM varies among water management districts.

EPC:
1. Mitigation is considered only after avoidance and minimization of wetland impacts have been determined infeasible. One mode of mitigation is the mitigation bank. The only mitigation bank in Hillsborough County is evaluated using WRAP not UMAM because that was the evaluation tool used to permit it; WRAP applies for FDEP and EPC’s 1:1 mitigation ratio in place at the time of the bank permit issuance.

- What are the positive aspects of the current Mitigation Process?
  1. The current mitigation process provides protection of isolated (< 0.5 acre) systems, except for Agricultural Rule exemptions.
  2. Each proposed impact area is reviewed individually regardless of size.
  3. The mitigation policy is used sequentially following a review to achieve avoidance and minimization of wetland impacts.
  4. UMAM allows for non type-for-type options.

Recommendations:
1. Keep the avoidance and minimization process as the first step and the jurisdiction (protection) of isolated less than 0.5-acre systems.
2. Calculation of UMAM scores should be consistent among EPC, FDEP, and the Southwest Florida Water Management District.
What are the negative aspects of the current Mitigation Process?
1. See the Mitigation Banking paper.
2. Occasionally, too much time is spent on very small wetland sites with negligible and truly unavoidable impacts.
3. Native upland habitat with good ecological integrity may be destroyed to create wetland mitigation areas.
4. The process should require the use of scientifically-based restoration science.
5. EPC should have experienced technical review and qualified QAQC of reviewer decisions to avoid rejecting a design by a wetland professional or applicant for technical feasibility when the plan is technically feasible.
6. EPC should strive to have a consistent definition of restoration and enhancement with federal and state agencies and peer-reviewed scientific publications.
7. EPC should incorporate information on known life history requirements of wildlife species that are wetland dependent for all or parts of their life cycles to be managed in association with a wetland.
8. In some cases, EPC may be undervaluing the habitat provided by invasive exotic and nuisance plant species, and giving disproportionate credit for the removal of invasive exotic plant species when those species are providing otherwise unavailable habitat for wildlife species.

How could these negative attributes be addressed?
1. The rule could be changed to provide more flexibility for the applicant; in those cases when there is an obvious benefit to the environment.
2. Use leading restoration models and sound wildlife science.
3. The process should concentrate on satisfactory evaluation of constraints and opportunities on each site.
4. Require upland buffers for created wetlands.
5. UMAM calculations should be modified to account for wildlife benefits provided by invasive exotic plant communities to assure wildlife population management (e.g., Brazilian pepper provides nesting substrate for colonial waterbird species or cover for declining populations of native turtles in the absence of sufficient native forest in some cases).

How could the current mitigation process be improved?

Quality Control
1. Applicants should be sent a letter/email (applicant preference) notifying them that their submittal is incomplete and they have (# to be determined – suggestion: 30 days consistent with water management district time frames) to supplement the application and make it ‘complete’. Providing a ‘grace period’ to complete incomplete submittals would enhance the perception of ‘fairness’ of the EPC application process.
2. The current application “form” is perceived to be difficult and we recommend that it be replaced with an ‘application checklist’ similar to the wetlands jurisdictional delineation request form.
3. The consulting team should avoid inconsistencies between engineering plans and consultant plans by submitting one set of signed and sealed plans for review. In addition to sign-offs by a licensed professional engineer ‘P.E.’, EPC should consider requiring mitigation plans to be signed by an appropriately credentialed professional. For wetlands jurisdictional delineations: Professional Wetland Scientist ‘PWS’ (Society of Wetland Scientists); for mitigation plans: PWS or Certified Wildlife Biologist ‘CWB’ (The Wildlife Society), or ‘Certified Senior
Ecologist’ (Ecological Society of America). In some cases, technical support will also be needed by other professional certifications such as a certified ‘Professional Geologist’, ‘Certified Professional Soil Scientist’ (Soil Science Society of America), or ‘Certified Fisheries Scientist’ (American Fisheries Society), or similar certifications by accredited professional societies. In some cases, credentialing through superlative education and professional experience may be appropriate. Requiring the participation of credentialed professionals would enhance the quality of mitigation submittals.

o Mitigation Committee meeting process.
   1. See the Process Committee and Classification Committee recommendations.
   2. We recommend that EPC establish a collaborative process directed towards introducing relevant site opportunities and constraints as early as possible in the process. The process should emphasize communication, information exchange, and technical accuracy.
   3. Develop guidelines for when the process is needed vs. a streamlined process (e.g., staff level review vs. invoking the full committee).
   4. Eliminate the applicant ‘stepping out of the meeting’ while the permit decision is being made regarding the project; the meetings should be collegial and closed door discussions should be avoided. If there is broad disagreement among EPC staff and a permit decision cannot be rendered the same day, the EPC staff should identify during the meeting the regulatory or design questions at issue, and identify additional information that may be needed to allow them to make a decision pending receipt of it. Applicants typically attend meetings with various technical and legal representatives present at substantial cost. Such investments in time and technical expertise should be mutually respected and every opportunity should be taken to identify any technical or legal questions and resolve them during the meeting. Comprehensive meeting notes should be taken during the meeting and provided to all participants similar to the Southwest Florida Water Management District process.

Should there be a new application? Yes, that would help.
   o Provide suggested language
      1. Develop a checklist and application form similar to the wetlands jurisdictional delineation checklist as a guided planning tool; make the forms available on line in editable format.

➢ What would be the Basis of Review for a mitigation project from start to finish?
   o Provide suggested language.
      1. Refer to suggested checklist.
      2. Reference publications on designing mitigation projects and require participation of qualified or certified professional scientists.

➢ What are the positive and negative attributes of “Enhanced Mitigation” (i.e., mitigation greater than a calculated UMAM score or other benefits to justify wetland impacts)?
   2. Pro: Net benefits could override impacts.

➢ Should the quality of a wetland be justification to impact it?
   1. The “quality” of a wetland is a two-edged sword – it represents a basis from which to determine mitigation options. Quality can be a commentary on surrounding land
management if a wetland has become degraded. Quality presents both constraints and opportunities for protection, enhancement or restoration of a degraded wetland after avoidance and minimization have been addressed. Quality, future potential integrity within the watershed, and the likelihood that mitigation can be provided to offset impacts may drive site evaluation decisions.

2. Wetlands should be evaluated as systems; most ‘degraded’ wetlands can be improved, and ‘degradation’ is a short-sighted perspective on wetland functioning. When wetlands are ‘degraded’, regulatory agencies should look more assertively for the cause(s) of the degradation throughout the relevant area and implement landscape level changes.

Other comments, questions or concerns:

1. Many ditches are surrogates for formerly existing natural creeks, or shortened conveyances between remaining sections of a natural creek. EPC should be encouraged to include a ‘natural streambed’ design option for ditch construction to more closely emulate natural creek configurations. Redesigning ditches would slow flow transit times, and increase on site retention to hold water for recharge, filtration, and other functions and values. These areas provide habitat for resident, foraging and nesting wildlife (turtles, birds, fishes, macroinvertebrates, etc.). Guidelines should be developed for the management and timing of maintenance of native and nuisance or invasive plant species to avoid impacting nesting wildlife.