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clean water & wetlands Resources

Mitigation Banking Guidelines

Mitigation Banks are a form of compensatory mitigation under which applicants for permits to fill wetlands under Section 404 of the Clean Water Act may satisfy requirements for offsite mitigation of wetland losses by purchasing "credits" in other wetland areas which have been or are proposed to be restored, created, or enhanced. The use of mitigation banks is a new and controversial issue that goes beyond the Sierra Club's existing wetlands policy (adopted May 2-3, 1987, code 6.3) and guidelines for mitigation of wetland losses developed by the Club's Coastal Committee.

Many scientists agree that the use of any kind of compensatory mitigation as a means to achieve no net loss of wetlands is flawed because wetland biologists do not have the technical ability to create or restore all of the functions of complex wetland systems. A recent study by EPA's Wetlands Research Program has shown that most mitigation projects have been poorly designed, and have resulted in conditions that are fundamentally different from the wetlands they are intended to replace. ["Science" Vol. 260 25 June 1993 at page 1891].

The following guidelines for mitigation banks have been developed because of the many recent mitigation bank proposals and the special risks that these proposals present, such as:

- Mitigation banks are likely to facilitate developments in existing wetlands by promising restorations that may never be successfully completed and will not replace, much less increase, wetland functions.
- Destruction of smaller natural wetlands may be justified by arguments, often unsupported by science, that consolidation into larger sites will provide more ecological benefits, ignoring the fact that bigger is not always better when it comes to many species of plants and animals, and further ignoring the difficulties involved in replacing wetlands functions such as habitat, flood abatement, and water purification in locations away from the impacted site.
- Mitigation Banks are likely to be located far away from impacted wetlands and are unlikely to replace important functions.
- Many proposals for mitigation banks are made to justify destruction of allegedly "less valuable" existing

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- Mitigation banks may be located in existing functioning wetlands, thus resulting in net loss of wetlands.
- Restoration or creation of large wetland sites is ecologically and financially risky and the bank promoter/owner may default in its obligations.

The Sierra Club's existing wetlands policy and guidelines for mitigation of wetland losses, in recognition of the shortcomings of compensatory mitigation, impose conditions and restrictions on mitigation which would also apply to mitigation banking. Among these are the following sequencing requirements:

- development activities that involve alteration or destruction of wetlands should have extensive public review to demonstrate that no practicable alternative exists that would have less environmentally damaging impact; [this would include a requirement for the permit applicant to demonstrate that no alternative upland site exists for the project]
- compensatory mitigation is not an acceptable alternative to eliminating or minimizing avoidable damage; and
- if alteration or destruction of a wetland is unavoidable there must be compensatory mitigation which results in replacement of lost functions and values and a net gain in wetland acreage.

Because of the substantial risk that use of mitigation banks would result in the failure to protect or restore wetland values and functions, the establishment and use of such banks for compensatory mitigation should be opposed unless the following conditions are met:

1. In addition to conforming with the sequencing requirements set forth above, mitigation banks should be used as compensatory mitigation only for small fills and only where compensatory mitigation at or adjacent to the project site is not practicable; an example would be the use of mitigation bank credits for wetland losses of one acre or less allowed by Nationwide, Regional, and Statewide General Permits which do not provide for other forms of compensatory mitigation.
2. The use of mitigation banks must be predicated on the recognition that all wetlands have some intrinsic functions and values that should be protected and/or restored, and that all functions and values in a particular watershed must be evaluated when considering the development of a mitigation bank.
3. Mitigation banks should be designed and managed to restore all functions that may be lost in the watershed, such as wildlife habitat, flood protection, groundwater recharge, and water purification. It must be guaranteed that use of the mitigation bank will result in replacement of lost wetland functions and values and a net gain of wetland acreage.

4. Mitigation bank sites should be located in the same hydrologic unit, (as defined by U.S. Soil Conservation Service and/or U.S. Geological Service) as the wetlands proposed for alteration or destruction. In any case credits in any bank should be available only to compensate for wetland losses near the bank.
5. Mitigation bank sites should only be established in accordance with, and be incorporated into an approved water quality or watershed management plan. The plan should identify and preserve all sensitive/critical areas, including wildlife habitat, wildlife corridors, streamsides, aquifer recharge areas, floodplains and wetlands within the watershed, and provide for adequate buffer zones along streams and around lakes and wetlands, and control of soil erosion and sedimentation and other pollution factors that might affect the bank site. The plans for each site should be reviewed and approved by certified professional ecologists and hydrologists. The use of mitigation banks should be restricted to those watersheds in which it has been determined by the appropriate state and federal water quality and wildlife agencies after opportunity for public comment that wetland restoration projects planned and likely to be completed will increase the acreage, functions, values, and diversity of wetlands in the watershed.
6. Mitigation banks should be developed only by the restoration of drained, diked, or severely degraded wetlands, not by creation of artificial wetlands (which have very little chance of success); the preservation of existing wetlands is under no circumstances an acceptable form of compensatory mitigation for wetland losses because it will result in a net loss of wetland acreage and functions.
7. The full costs of mitigation banking (e.g. planning, land acquisition, long term management, monitoring) should be borne by the applicant obligated to provide compensatory mitigation. Public funds should not be used to finance creation of private banks or banks used for the mitigation of private projects. Banks used for the mitigation of private projects should not be established on public land unless and until the public owner has been paid the full market value of the land.
8. Since mitigation should be completed before wetlands are altered or destroyed, restored wetlands in a mitigation bank must be in place and functioning before any transfers of credits occur. The developer of the bank must also provide a performance security bond before any credits can be sold. If at any time the bank wetlands are not fully functional, no credits should be allowed as mitigation for any project until the bank wetlands are again fully functional.
9. Public infrastructure projects must comply with the sequencing requirements set forth above, and must comply with all provisions of federal and state law including the National Environmental Policy Act, the Intermodal Surface Transportation Act, the Clean Air Act, the Clean Water Act, the Endangered Species Act,

and the Coastal Zone Management Act.

10. The developers of a mitigation bank must provide financial assurances and cause deed restrictions to be imposed to guaranty in perpetuity that the bank site will not be developed and that it will be owned, managed and maintained to protect all wetland functions and values associated with the bank. The following are examples of activities that should be prohibited except as necessary to maintain the restored wetland and associated habitat, or enhance populations of native species:
 - Filling, excavating, dredging, ditching, burning, draining, mining, drilling, removal of topsoil, channelizing, clearing, earthmoving, plowing, disking, or construction of structures;
 - Removal of wildlife or disturbance of nesting or spawning areas;
 - Farming, harvesting of trees, wildflowers, fruits, seeds or wood;
 - Changing of topography, dumping of ashes, trash, or debris;
 - Manipulation or alteration of natural watercourses, lake shores, floodplains, or other waterbodies, or any activities that degrade water quality.
11. A long-term monitoring program with adequate provisions for regular inspection by regulatory agencies, and public access to all records, reports and monitoring data should be required, such program to commence upon completion of the work on the mitigation bank site.
12. Clear goals and performance standards should be established for each mitigation bank site; a management plan should be prepared that identifies the wetland functions and values to be restored, and defines the operational criteria required to assure the long-term maintenance of such wetland functions and values. The plan for each site should include provision for adequate buffer zones around the edges of the wetland to prevent encroachments or runoff into the wetland, and should outline the action to be taken to remedy any problems or deficiencies found from the monitoring program.
13. Provision should be made for public participation in all phases of any mitigation bank proposal, including planning, construction, operation, and monitoring. [The above guidelines are not official Sierra Club policy. They were developed to help interpret and implement the Club's policy on wetlands.] Adopted March, 1994 by the National Wetlands Committee.

See also [Sierra Club Policy on Mitigation Banking](#).

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