

APPENDIX C

Models for wetland and aquatic resource mitigation markets and agriculture

With large sums of money currently being spent by transportation, housing, commercial, and other developers on various kinds of environmental mitigation,¹ it is worth considering how (or if) wetland and other mitigation funding might help create an open, viable, conservation services market in which agricultural producers could participate and to which the environmental services they can provide could contribute.

The programs and “markets” described below are structured in various ways. Some have occurred through mitigation banks, some through government in-lieu fee programs, and some by way of direct trades or other programs. Funding for them is, for the most part, grounded in public demand that we stop the loss of wetlands and aquatic resources and the implementation of that demand through the Clean Water Act and similar laws. Wetland mitigation, because of its current requirement for acre-for-acre replacement leaves limited opportunities for agriculture. So not all of these examples clearly involve agriculture – but there may be lessons to be learned for such involvement:

a) **Montana Wetland Legacy program and In-Lieu-Fee program - MT²**

As its name suggests, the goal of the Montana Wetlands Legacy (MWL) program is the protection, restoration and enhancement of wetlands. MWL is a program managed by the Montana Department of Fish, Wildlife and Parks. In coordination with the wetlands protection effort, however, MWL also has other funding with which it works broadly across the landscape to assure that lands surrounding those wetlands are also healthy – including working with local farmers and ranchers using surrounding watershed lands. Some 800,000 acres of surrounding watershed lands have been protected or improved through use of leases, easements, cooperative agreements, and fee acquisition. Some examples of particular interest to agriculture include:

- a. **Gordon Ranch**: To help protect the large areas of prairie grasslands needed for key species of prairie-dependant wildlife, MWL entered into a 15,000-acre conservation easement with the Gordon Cattle Company. This protects the large areas needed as well as some 400 acres of wetlands included in the easement. Under the easement, the Gordon family will continue with their traditional grazing management of the ranch.
- b. **McMaster Ranch**: MWL participated in the outright acquisition by BLM of the 5,636 acre McMaster Ranch. The conservation motive was the protection of fish and wildlife habitat on the Ranch. Additionally, however, the BLM will now maintain a federally managed grass bank on the property that will provide a cattle grazing alternative for area ranchers using the public lands and improve grazing management on public leases in the Elkhorn Mountains.
- c. **Granger Ranch**: Motivated by a desire to protect and restore a large wetland at the headwaters of O’Dell Creek, MWL is developing a conservation easement with the Granger Ranch, a Montana cattle operation that has been in the same family for five

For further information about this paper, contact Don Stuart through: www.donstuart.net

generations. The Granger easement will also facilitate continuation of livestock production and other traditional agricultural uses on the ranch.

- d. Ward Ranchland Exchange: When the Ward family found it necessary to place their 2,200 acre ranch on the shore of Hauser Lake, near Helena, MT, on the market, MWL participated in a multi-party transaction that involve BLM, The Conservation Fund, several local ranchers, and the Ward family. BLM acquired the Ward property which had high conservation values. But in exchange, and to pay for the acquisition, BLM sold several smaller parcels that were already in public ownership to several private ranchers – usually to ranches that had grazing leases on the lands. The result for local agriculture was no net increase in public ownership and no net loss of agricultural land, while several farmers in the area got the chance to acquire range properties important to their operations.

MWL is funded through several sources, one of which is the Montana In-Lieu-Fee Aquatic Resource Mitigation Program (ILF Program) resulting from an agreement with agencies of the State of Montana and the U.S. Corps of Engineers (which oversees the national no-net-loss of wetlands policy). The goal of this agreement was:

“ . . . to establish an additional voluntary mechanism to compensate for aquatic resource impacts and losses resulting from regulated activities in Montana and to provide greater flexibility for project mitigation to permittees.”

Under the agreement, the In-Lieu-Fee option is only made available to permittees after avoidance and minimization of wetland impacts have been accomplished and when there is no practical opportunity for on-site compensatory mitigation or when in-lieu-fee is environmentally preferable to on-site compensatory mitigation. The agreement specifies that In-Lieu-Fee funds must be used for:

“ . . . activities directly related to physical aquatic habitat and resource establishment, restoration, enhancement, and protection to include the following: land acquisition, purchase of permanent easements, purchase of water rights, in-stream flow leasing, development of mitigation and monitoring plans, permit fees, implementation of physical mitigation and monitoring, administrative costs, and long -term management of mitigation parcels.”³

Funds must be spent in the watershed in which they were generated and based on priority watershed needs determined by the In-Lieu-Fee committee, which reviews and recommends projects on a case-by-case basis. And the protection of sites funded through In-Lieu-Fee compensatory mitigation funds must be permanent.

Considerations:

The Montana In-Lieu-Fee program, together with its funding for the Montana Wetlands Legacy program – particularly as it plays out for agriculture – illustrates opportunities and limitations in the possible use of in-lieu-fees. Simply paying a fee – even a rather substantial one – can often be preferred by a developer over being responsible for creating and shepherding the performance of a compensatory wetland. On the other hand, as the agreement with the Corps of Engineers illustrates, there is natural concern that the environmental damage that is done by the development actually get replaced and ultimately functions as well as what was destroyed. So the agreement with the Corps of Engineers is fairly specific about how these funds will be spent.

For further information about this paper, contact Don Stuart through: www.donstuart.net

Even so, however, the agreement also provides the In-Lieu-Fee program with some latitude to use various funds in ways that result in the broad protection of aquatic resources – using a variety of tools. The program, taken as a whole, does provide some clear benefit to agricultural landowners. It is not yet clear the extent to which arrangements of this kind may be able to free up, at least to a limited degree, some of the current spending that is now largely required to be simple acre-for-acre wetland replacement – but any such “freeing up” is certain to be controversial and, at times, simply not lawful under §404 the Clean Water Act.

Contact:

Montana Wetlands Legacy

1400 South 19th

Bozeman, MT 59718

thinz@mt.gov

(406) 994-7889

b) Kentucky Wetland and Stream Mitigation Fund - KY⁴

Kentucky has had an in-lieu fee mitigation program since 1998, but in 2000, the State of Kentucky specifically created the “Kentucky Wetland and Stream Mitigation Fund” designed to use moneys resulting from permit requirements arising out of environmental concerns – particularly wetland mitigation. Because the funding source requires that it be spent for aquatic resource mitigation, the projects funded are also so limited, to: “restoring, creating, enhancing, or preserving the Commonwealth’s wetlands or streams . . .” The program works mostly with private landowners on in-stream or riparian projects. All projects must be protected by easements or ownership along the stream and riparian corridor. This program has become substitute for mitigation banks in Kentucky, since it has few mitigation banks banking acquisitions in anticipation of future need. The plan is to have a mitigation bank available in each of the major watersheds in the State. The primary driver behind the program is the Kentucky Department of Transportation which has a powerful need to efficiently mitigate the impacts of its projects.

Considerations:

It appears that some of the Kentucky “mitigation bank” projects funded by this program occurred on agricultural lands.⁵ The mitigation projects they are undertaking seem to include both wetlands and stream restoration/protection. This does include stabilization and replanting of eroding and degraded riparian zones that could help stabilize adjacent agricultural fields. They also insist on permanent protection of the restored area with outright purchase or an easement for a distance of at least 25 feet and preferably 50 feet both sides, which could take meaningful amounts of land out of agriculture. However, funding through this program would potentially match and combine with other funding sources that could provide additional upland benefit through the use of traditional BMPs and potentially through the use of purchased development rights. Since this program is largely funded by funds from aquatic mitigation sources, the program’s expenditures seem pretty limited to the purpose stated.

For further information about this paper, contact Don Stuart through: www.donstuart.net

Contact:

Bill Sampson
Kentucky Department of Fish & Wildlife Resources
Bill.sampson@ky.gov
#1 Sportsman's Lane
Frankfort, KY 40601
(502) 564-7109 ext. 328

c) ***North Carolina Ecosystem Enhancement Program - NC⁶***

North Carolina's Ecosystem Enhancement Program is a broad partnership between agencies, interests, and developers to create a comprehensive one-stop fee-in lieu site for environmental mitigation needs of all types in the State. The mission is broad:

“ . . . restore, enhance, preserve, and protect the functions associated with wetlands, streams and riparian areas, including but not limited to those necessary for the restoration, maintenance and protection of water quality and riparian habitats throughout North Carolina.”

In accomplishing this mission, the program incorporates four in-lieu fee programs:

1. A “Stream and Wetland” in-lieu fee program,
2. A “Riparian Buffer Mitigation” in-lieu fee program,
3. A “North Carolina Department of Transportation Stream and Wetland” in-lieu fee program, and
4. A “Nutrient Offset” in-lieu fee program.

The overall focus of the program is on wetlands and riparian function. And the program requires, before any work will be done in a wetland or riparian restoration project, that the property be either owned outright by the State or the landowner provides a perpetual conservation easement covering the area of the restoration action. Project work is paid for by the program and easements (or acquisitions) are purchased at fair market value.

The Nutrient Offset program is actually administered by the North Carolina Dept. of Environment and Natural Resources Division of Water Quality which, among other things, pays farmers to implement appropriate BMPs to accomplish the needed nutrient reductions required. This program only applies in the Neuse and the Tar Rivers. It also appears that the Ecosystem Enhancement Program also completes wetland and riparian projects (using easements, etc. as described above).

Considerations:

The North Carolina approach incorporates a broad partnership to draw most environmental mitigation funding into a single agency that can then plan on a watershed basis and achieve the most targeted, strategic restoration projects in providing mitigation. The key limitation is that its focus on riparian and wetland mitigation and requirements of acquisition or easement limit the program's utility for agriculture, with the exception of the Nutrient Offset program. So, for farmers disinclined to the use of easements and without riparian or wetland properties to protect or improve, the program has limited application outside the Tar and Neuse River basins.

For further information about this paper, contact Don Stuart through: www.donstuart.net

Contact:

Bill Gilmore, Director
NC Ecosystem Enhancement Program
1652 Mail Service Center
Raleigh, NC 27699-1652
919)715-0476
Bill.Gilmore@ncmail.net

d) **In-lieu fee Aquatic Resource Mitigation Fund - NH**⁷

New Hampshire has adopted an in-lieu fee “Aquatic Resource Mitigation” (ARM) fund. The fund is used when regulation requires a developer to perform compensatory mitigation but such mitigation is not practicable – usually because the project is a small one that would have difficulty finding an appropriate site. The developer is instead allowed to pay an in-lieu fee to the fund which takes on responsibility for replacing the functions and values that have been damaged.

An evaluation of the damaged aquatic resources is performed to determine the functions and values that have been lost – called a “functional assessment.” According to the ARM press release announcing adoption of rules in 2006: “By pooling funds from many projects, the ARM fund has the potential for long term environmental results from wetland mitigation that considers watershed goals . . .” The State pools the funds collected and then, based on appropriate watershed priorities, funds conservation in the watershed that is seen as most important and strategic.

New Hampshire’s rules define “compensatory mitigation” somewhat broadly. Env-Wt 101.17: “Compensatory mitigation” means creation of a new wetland, restoration of a wetland, or preservation of land to offset the impact of a project by replacing or partially replacing wetlands functions and values lost due to the project, or by substituting the value added to a wetland or wetland system for the functions or values lost.”

Landowners can apply to the ARM fund to have a wetland replacement project completed on their land. The general compensatory mitigation program does include the acquisition of easements on buffers on uplands to prevent development that would compromise the wetland.

Considerations:

This program may be typical. It seems clear that projects completed will be (as they must) focused on wetland function replacement. But among the projects allowed for wetland mitigation are those that involve conservation of undeveloped uplands with conservation easements that will protect the function of the actual wetland. And a broad definition of “compensatory mitigation” may leave open the possibility of the use of these services being provided on traditional agricultural lands. Since this program is for small parcels (presumably ones that are beneath the Corps of Engineers jurisdiction).

For further information about this paper, contact Don Stuart through: www.donstuart.net

Contact:

Lori Sommer
Hew Hampshire Department of Environmental Services
603-271-4059

e) Oregon Department of State Lands in-lieu fee program - OR⁸

Oregon has a wetland mitigation in-lieu fee program for small projects that do not fit the Corps of Engineers requirements. The program will only pay for actual creation, restoration, or enhancement of wetlands. Properties involved are required to be protected by perpetual easement. Other property acquisitions or easements are not allowed unless they are closely associated with an actual creation, restoration, or enhancement of a wetland. The goal of the program is to use in-lieu fee funds from small projects to replace those losses with more larger and more effective sites at appropriate locations.

On January 4, 2008, Oregon reported interagency recommendations on the use of in-lieu fee funding for all types of projects.⁹ The interagency recommendations call for scrupulous use of funds to serve the purpose for which they are intended, but encourage purposeful leveraging of various sources of funds to achieve ecological gains. Funds for wetland mitigation could be used, for example, in conjunction with other, non-wetland funds where both together achieve an optimal outcome.

Considerations:

Oregon's program illustrates the limitations of current wetland funding – when the loss is clearly a wetland loss, the funds will be clearly designated for wetland replacement, not separated into environmental functions that could readily be supplied by most farmers.

Contact:

Dana Hicks, Mitigation Specialist
Oregon Department of State Lands
(503) 986-5229
dana.hicks@state.or.us

f) State department of transportation programs:

One of the biggest needs for mitigation arises out of the many state highway projects under constant construction nationwide. In response to this need, state highway departments have become very creative and determined to produce the wetland mitigation they need. The Federal Highway Administration provides a complete, on line, catalogue of these programs.¹⁰ Informational contact would be with the individual state highway program listed. For the most part, these programs currently offer little opportunity for agriculture.

APPENDIX C ENDNOTES

¹ An estimated \$350 million is spent annually on environmental mitigation just on public transportation projects in the Puget Sound Basin alone. Ibid, note 9.

² See generally, Montana Wetlands Legacy website at: <http://www.wetlandslegacy.org/index.html>. See specifically the Gordon Cattle Company Conservation Easement project at: <http://www.wetlandslegacy.org/gordon.html>; Public-Private Partnership: Protects Historic Working Ranchland, Wildlife Habitat, & Recreation Areas in Western Montana, found at: <http://www.wetlandslegacy.org/public-private.html>; Odell Creek Headwaters Wetland & Conservation Easement Project, at: <http://www.wetlandslegacy.org/odell-creek.html>; Ward Ranchland Exchange, at: <http://www.wetlandslegacy.org/ward-ranch.html>; and materials on Montana's In-Lieu-Fee Aquatic Resources Mitigation Program. See explanation at: <http://www.wetlandslegacy.org/inlieunext.html>. And see the Montana In-Lieu-Fee Program agreement at: <https://www.nwo.usace.army.mil/html/od-rmt/pn/ilfdraftmoa.pdf>.

³ This language seems pretty typical of most such agreements. See: "The Status and Character of In-Lieu-Fee Mitigation in the United States" (Environmental Law Institute, June 2006) pg. 31-32. This report can be downloaded for free from the ELI website at: http://www.elistore.org/reports_detail.asp?ID=11151.

⁴ "The Status and Character of In-Lieu-Fee Mitigation in the United States" (Environmental Law Institute, June 2006) pg. 31-32. This report can be downloaded for free from the ELI website at: http://www.elistore.org/reports_detail.asp?ID=11151; "Kentucky Department of Fish and Wildlife Resources' In-lieu Fee Program for Stream and Wetland Mitigation," at <http://www.watersheds.ky.gov/NR/rdonlyres/CB4CDD7D-DA51-4DD8-A2A8-2ABE1EB7649C/0/KentuckyDepartmentofFishandWildlifeResources.doc>; The Kentucky Department of Fish and Wildlife Resources Stream and Wetland Restoration Program at: <http://www.kdfwr.state.ky.us/streamandwetlandrestoration.asp?lid=1928&NavPath=C101C552C639>; Mill Branch Stream Restoration Project, NRCS web pages at: <http://www.ky.nrcs.usda.gov/news/BlacksideDACE.html>; Kentucky's Fees In-Lieu of (Mitigation) Programs, PPT presentation by Jennifer Garland, (11/17-18/05) at: <http://www.water.ky.gov/NR/rdonlyres/4F3553D9-E6CB-4DE8-AB5C-AEB467E1BBB9/0/404FILO.ppt>; and, Kentucky Wetland and Stream mitigation fund project descriptions in Federal Highway Administration website at: <http://www.fhwa.dot.gov/environment/wetland/scanrpt/ky.htm>.

⁵ Kentucky Wetland and Stream mitigation fund project descriptions in Federal Highway Administration website at: <http://www.fhwa.dot.gov/environment/wetland/scanrpt/ky.htm>, Pg. 3.

⁶ See the description of North Carolina's Ecosystem Enhancement Program – particularly their in-lieu fee component. <http://www.nceep.net/pages/mitigate.htm> and linked pages. Also see paper "Applying Lessons Learned from Wetlands Mitigation Banking to Water Quality Trading" pp. 24-25, (Abt Associates, 2/28/05) on line at: http://www.abtassociates.com/reports/WQT_Lessons_from_Wetlands_Mitigation_Banking.pdf. Also see 9/11/2008. See NC DENR Division of Water Quality Non-point Source Management Program website at: <http://h2o.enr.state.nc.us/nps/whatisnps.htm>. Finally, see the MOU with the Corps of Engineers that creates the program at: http://www.nceep.net/images/WRP_MOU.pdf.

⁷ See: New Hampshire "Environmental Fact Sheet" on Aquatic Resource Mitigation (2008) at: <http://des.nh.gov/organization/commissioner/pip/factsheets/wet/documents/wb-17.pdf>, New Hampshire DES adopts new environmental mitigation rules – press release (12/14/06) at: <http://des.nh.gov/media/pr/documents/061214.pdf>, and NH Compensatory Mitigation Information and Checklist at: <http://des.nh.gov/organization/commissioner/pip/factsheets/wet/documents/wb-16.pdf>. Also see the regulations for the program at: PART Env-Wt 807 .01 – 19 on line at: <http://des.nh.gov/organization/commissioner/legal/rules/documents/env-wt100-800.pdf>.

⁸ The Oregon Department of State Lands payment in lieu wetland grant program described at: <http://www.oregon.gov/DSL/PERMITS/pil.shtml>, and associated links.

⁹ See: "Pubic Funds to Restore, Enhance, and Protect Wetland and At-Risk, Threatened and Endangered Species Habitats: Appropriate Uses of these funds in Species and Wetland Mitigation Projects" (Interagency report January 4, 2008) at: <http://www.fws.gov/oregonwo/LandAndWater/Documents/PublicFunding-final.pdf>

¹⁰ See the Federal Highway Administration's list of domestic state highway department wetland programs at: <http://www.fhwa.dot.gov/environment/wetland/scanrpt/index.htm>.