

# Mitigation

*The Ecosystem Marketplace's Daily Coverage of the 2006 Mitigation/Conservation Banking Conference*

Tuesday, April 25, 2006

Volume 1, Issue No. 1

## Mixed Reactions

*Environmentalists and others react to the new mitigation regulations put out by the US Army Corps of Engineers and the EPA*

**Page 1**

## Today's Agenda

*A handy version of today's official agenda*

**Page 2**

## Welcome!

*This year the Ecosystem Marketplace has decided to produce a daily conference newsletter to keep you informed and help you catch up on sessions you may have missed*

**Page 2**

## Banking 101

*Attendees arrived on Monday to get a primer on the mitigation/conservation banking industry from some old pros.*

**Page 4**

## Oregon Innovates

*The Oregon Department of Transportation has been looking at new approaches to conservation/mitigation banking.*

**Page 5**

## Stream Mitigation: Harder than Rocket Science?

*At the first session of this year's conference, bankers and others noted that streams hold both promise and peril*

**Page 8**

## Reactions to the New Regulations

by Alice Kenny

*The U.S. Army Corps of Engineers and the U.S. EPA recently released a draft of the new guidelines for Compensatory Mitigation for Loss of Aquatic Resources. The Ecosystem Marketplace finds out what environmentalists, developers, in lieu fee providers and bankers think of the proposed regulation.*

In 2003, Walter Jones, a North Carolina congressman, slipped authorization to revamp the wetland mitigation banking industry into a bill funding U.S. troops in Afghanistan and Iraq. Two years later, the draft regulations are now open for comment until May 30; a final version of the regulations should be signed into law within a year.

As proposed, the new regulations would promote wetland mitigation banks – which restore wetlands in

exchange for government credits that can then be sold to developers impacting other wetlands – by requiring developers planning their own mitigation to meet the tighter, more expensive rules governing mitigation bankers. The regulations also phase out one of mitigation bankers' main competitors, "in lieu fee providers," organizations paid by developers for promises of future restoration.

Not surprisingly, mitigation bankers praise the proposed regulations, saying they are a competent way to shore up their industry while increasing the number of healthy wetlands in the United States. While still wading through

dense copy published in the Federal Register on March 28, others have been far more reserved in their assessments.

"If bankers are writing regulations for their own industry and giving it a preference, that tips the scale," says environmentalist Patricia White from Defenders of Wildlife, referring to Congressman Jones' large constituency of wetland mitigation bankers. "Bankers are an important asset to conservation, but they should not be calling the shots."

### Learning from History

In order to understand the aims of the new regulations, it is important to revisit the bleak history of wetlands preservation in the United States. Wetlands – once viewed as mosquito-breeding swamps but today valued for their sponge-like ability to



**As proposed, the new regulations would promote wetland mitigation banks by requiring developers planning their own mitigation to meet the tighter, more expensive rules governing mitigation bankers.**

## A TASTE FROM PORTLAND

Welcome to this the first issue of "Mitigation News," a daily newsletter produced by the Ecosystem Marketplace and covering what is happening at this, the 9th National Mitigation and Conservation Banking Conference taking place in Portland.

Why a newsletter you might ask? Well, quite simply, because most of us can't be in more than one place at once (much as we would like that it were otherwise).

As you will have noticed from the final agenda, this year's conference is so rich, that looking through the sessions and the list of attendees (there are more than 350 people registered we're told), one can't help but feel like a kid in an ice-cream shop: there are too many flavors and too little time. If only we could get one big cone with mini-scoops of every flavor, we'd be happy, but we can't, so we need to choose.

And choose we will, but if you are anything like us, you still want to at least know a bit about the other flavors; maybe get a small taste of one or two. That is precisely what this newsletter seeks to do: give you a small taste of what is happening throughout the conference and in sessions you may have missed.

And this applies not only to people at the conference, but also to those who weren't able to travel to Portland. Every morning we will also be posting copies of the newspaper on our web site and sending out .pdf copies to subscribers of our monthly e-mail newsletter on conservation/mitigation banking, "Mitigation Mail". So, to those of you reading this from somewhere other than Portland: Here is a taste of what you are missing.

In addition to this daily coverage of the conference, we will also be printing a feature story on some key aspect of mitigation/conservation banking, as well as guest editorials written by people with an interest in the issues (most of which are at the conference).

So, without further ado, here is your small-tasting-spoon's worth of information coming out of Portland. We hope you enjoy it and don't hesitate to let us know what you think, or if you would like to see us cover any particular issue or concept. Stop by our booth in Portland or write us at: [info@ecosystemmarketplace.com](mailto:info@ecosystemmarketplace.com); where taste-tests are not only gladly given, they're encouraged.

*The Ecosystem Marketplace Team*

## Reactions to New Regulations

(continued from page 1)

filter pollutants, restrain shoreline erosion and prevent floods – continue disappearing despite laws enacted to protect them. Plowed over by farmers and filled by developers, fewer than half the wetlands covering the New World at the time of its discovery by Europeans, remain. Congress, alarmed by wetlands' rapid disappearance, passed the Clean Water Act in 1972, mandating that developers replace as many wetlands as they destroy. Still, millions more wetland acres have disappeared.

Fed up, legislators gave developers three options. They could replace the wetlands they destroyed themselves; they could pay in-lieu-fee providers, typically nonprofit corporations, to replace them at some future time; or they could buy "credits" from wetland mitigation banks that proactively restore, enhance or create wetlands.

Nearly three decades later, Congress asked the National Academy of Science's National Research Council to assess mitigation programs' success at preserving wetlands. They also asked the U.S. General Accounting office to evaluate in-lieu-fee mitigation. Results from both studies were dismal. The Army Corps of Engineers, the agency assigned to supervise wetland protection, had been lax in its oversight, and wetlands were disappearing without being replaced. At first glance, a recent Bush-administration report indicates this trend has reversed. But after subtracting water bodies serving few wetlands purposes, such as golf course and storm retention ponds, the new study confirms wetlands' steady, albeit slower disappearance.

In addition to spotlighting problems, the National Academy of Science report also pointed the way toward some potential answers. The report, for instance, determined that more highly regulated mitigation efforts were more likely to succeed.

Among the three mitigation options – developers performing their own mitigation, in-lieu-fee provid-



ers and mitigation bankers – bankers are, by far, the most highly regulated group. Unlike their competitors, bankers can only release credits and get paid for wetland rehabilitation when they meet predetermined success criteria.

The report also noted that wetland restorations were more successful when considering an overall watershed approach. Leonard Shabman an economist and



wetland specialist who helped author the National Research Council study, says that instead of "sticking a wetland in the middle of a parking lot" as developers might do when performing their own onsite mitigation, mitigation efforts should look at what effect a wetland has on the overall watershed.

Rather than using acreage to measure replacement value, Shabman suggests analysts should evaluate the functions of soon-to-be destroyed wetlands and then consider how best to replace these functions.

Despite the publicity generated by the National Academy of Science's report, its conclusions initially produced few results. Developers still perform their own mitigation work 60 percent of the time with limited oversight. In seven percent of cases, developers meet their wetland replacement obligations



by paying in-lieu-fee corporations that promise to replace wetlands but do not always do so. And 33 percent of the time, developers buy credits in mitigation banks that, while shown to demonstrate the greatest potential for replacing wetlands, have also been cited for failures.

### A Mixed Reception

Drawing on the National Academy of Science's 2001 critique, the proposed regulations are intended to improve the federal track record when it comes to protecting wetlands. Reached at his office in Washington D.C., Shabman said he was pleased to see that the proposed regulations respond to most of the Academy's major suggestions. "They generally pick up on most of the themes, coming pretty close to the NRC report," he says.

The regulations prioritize avoidance and minimization of potential wetland impacts as the first line of defense for wetland preservation. When this is not possible, the regulations say that mitigation efforts



should consider a watershed approach, safeguarding the most important wetlands in the watershed instead of focusing only on the area surrounding the disturbed parcel.

Mixing its metaphors while listing its goals, the Army Corps of Engineers writes in the proposed regulations that it hopes to create “a level playing field” among the three compensatory mitigation mechanisms by “raising the bar” so that providers of high-quality mitigation are not disadvantaged by others held to lower performance standards. Ironically, the regulations envision leveling the playing field by doing away with mitigation bankers’ main competitors. Some have welcomed this development, but others deplore it.

“The regulations are all about supporting the mitigation banking industry,” says Julie Sibbing, senior program manager for agriculture and wetlands policy at the National Wildlife Federation.

To increase the odds that mitigation will actually occur, the proposed regulations encourage developers to rely on mitigation banks when they are locally available and require in-lieu-fee providers to convert their mitigation efforts into banks within the next five years. Scott Yaich, a wetland scientist and director of conservation programs for Ducks Unlimited, a world leader in wetlands preservation and an in-lieu-fee provider, says he is disappointed by this decision. “Removing this tool reduces flexibility to provide mitigation that replaces the full functional value of wetlands destroyed. The problem,” he continues, “has always been with accountability. There were lots of cases in the past where money was provided but wetlands were never mitigated. That’s a problem with enforcing accountability, a problem with the Army Corps of Engineers.”

Until now, adds White from Defenders of Wildlife, “no one was watching the farm.” By holding all providers to the same standards so that the high quality provider is not at a disadvantage to the low quality one, the percentage of successful mitigation efforts could go up, she says, but eliminating mitigation bankers’ competition could also come with an environmental price. “If you go into a store with 50 different kinds of bread”, she says, “each bakery has to bake their bread as well as it can, so it will sell. If there’s only one kind of bread, it can be bad but you have no choice but to buy it.”

Developers express similar concerns. When a single mitigation bank with no competition exists near a development site, the bank could charge exorbitant fees. Susan Asmus, vice president for the National Association of Homebuilders, worries that these fees might be passed on to home buyers in the form of higher house prices, but adds, “as a practical matter, homebuilders aren’t the right people to build wetlands just like wetland builders aren’t the right people to build homes.” The new regulations’ propose moving from a mathematical mitigation equation (replacing, for example, two acres of wetlands for every acre destroyed) to a functional one that seeks to get the greatest ecological result regardless of size. Asmus thinks this could ultimately save developers money.

But permitting smaller wetlands to replace larger ones – or preserving existing wetlands in exchange for destroying others – will not help realize the “no-net-loss” of wetlands mandated by the Clean Water Act, observes Sibbing of NWF.

And eliminating mitigation bankers’ main competitors could enable bankers to raise their prices and lower their quality. “Bankers and banks are not all created equally,” Sibbing says. “When they succeed, there will be a much larger bank of wetlands. When they fail, there will be a much larger mud hole.”



**“There were lots of cases in the past where money was provided but wetlands were never mitigated. That’s a problem with enforcing accountability...”**

Wetland bankers and regulators counter that the new regulations include enough safeguards to minimize the odds of mud holes. For example, they include requirements that mitigation efforts receive annual inspections. “The new mitigation rules,” says Rich Mogensen, a wetlands scientist and immediate past president of the National Mitigation Banking Association, “will bring all forms of wetlands mitigation to a higher and consistent level of review while promoting the use of mitigation banks, the most regulated form of mitigation.”

Palmer Hough, a point man at the EPA who helped draft the regulations agrees: “I would encourage people not to prejudge the regulations simply because they are the result of a Congressional Directive. Some have criticized compensatory mitigation as simply a paper exercise.”

From Hough’s perspective, the new regulations offer a prime example of creating a system that is good for the environment and good for business. Unlike traditional wetland replacements that will be phased out, wetland restoration credits granted to banks are tied to demonstrated achievement of project goals. “The proposed regulations,” he says, “would ensure that compensatory mitigation projects are more thoughtfully planned and successfully executed, making our commitment to no-net-loss of wetlands a reality.”

Alice Kenny is a regular contributor to the *Ecosystem Marketplace*. She may be reached at [alkenny@aim.com](mailto:alkenny@aim.com)



Visit us online at : [www.ecosystemmarketplace.com](http://www.ecosystemmarketplace.com)

# Introductory Workshop focuses on “How-To’s” of Banking

*Experienced bankers share “Lessons-learned” with beginners and newcomers to the world of conservation/mitigation banking*

Conference attendees arrived early on Monday to attend a half-day primer on mitigation and conservation banking. Designed for banking beginners and new enthusiasts, the workshop outlined the history of mitigation banking and explored the do’s and don’ts of structuring a bank – from site selection and monitoring, to the often confusing legal and financial considerations associated with a transaction. In the space of an afternoon, Craig Denisoff and Greg Sutter of Environmental Business Partners, and Robert Brumbaugh of the U.S. Army Corps of Engineers armed the group with a series of lessons and a thick binder (literally) of knowledge.

Brumbaugh and Denisoff launched the session with an overview of banking, highlighting fundamental differences between wetland mitigation and conservation banks. “For conservation banking,” Denisoff explained, “the focus is preservation and recovery of species rather than no net loss.” Conservation bank-

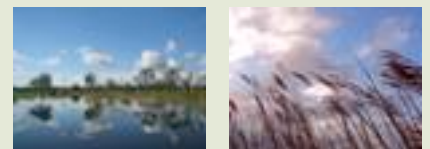
ing aims to preserve high quality habitat adjacent to source or core species populations, while ensuring long-term stewardship and habitat management – two objectives that, according to Denisoff, together lead to higher project standards than any other mitigation approach.

Workshop participants listened intently as Sutter and Denisoff reviewed their banking “how to’s” – lessons and points of consideration they themselves have learned over years of experience and practice. The bottom line? As Denisoff cautions, “Mitigation banking is a balance of business and biology.” While site selection and mitigation plans rely heavily on watershed ecology and regional conservation goals, a successful bank requires business acumen – legal, financial, and marketing know-how and a willingness to “be in it for the long term.”

“We need to step back as bankers,” Sutter emphasized. “We need to be entrepreneurial, but

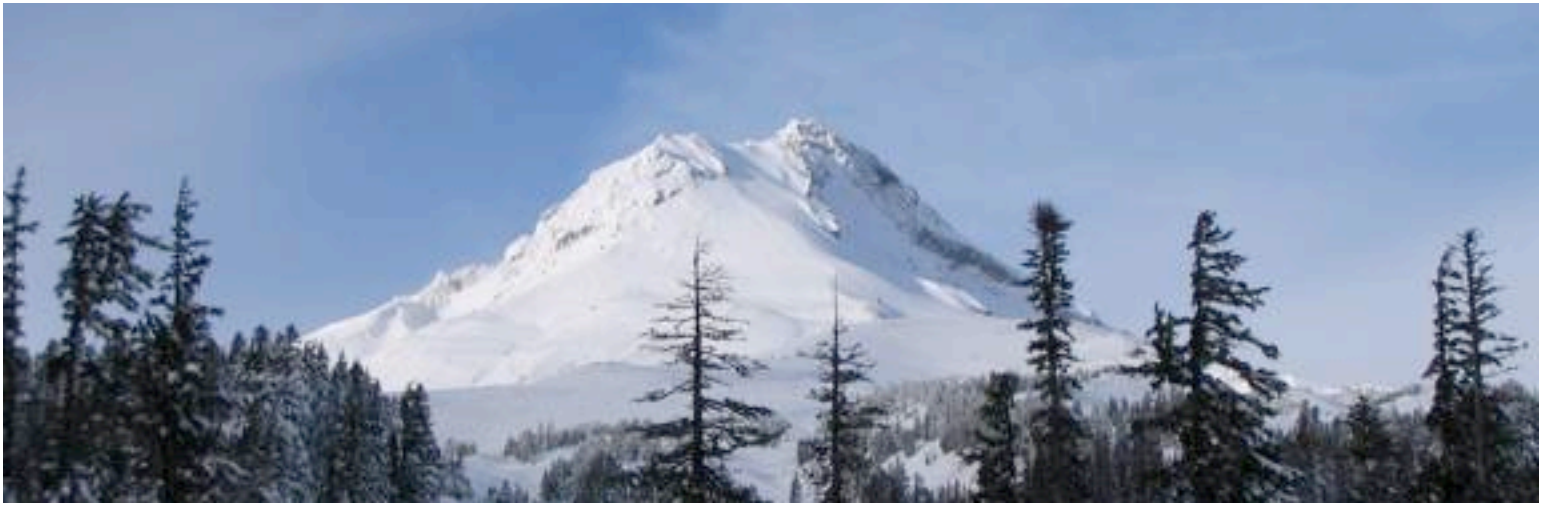
we need to think about long-term sustainability.”

As the session came to a close the speakers described a successful mitigation project, leaving the group with a final lesson: Mitigation banking is a challenging and risky endeavor, but with careful consideration, good judgment, and the sound advice of experts, it can be an effective, even profitable, conservation tool.



**“We need to step back as Bankers... we need to think about long-term sustainability”**





# Guest Editorial: Oregon Innovates

by Bill Warncke

*As the U.S. Federal Government releases new draft regulations for mitigation banking, the Oregon Department of Transportation has been working with a variety of state and federal agencies to come up with a more cost-effective and comprehensive approach to mitigation. Bill Warncke, Mitigation and Conservation Program Coordinator at the agency, explains this new approach.*

In some circles there has been a widely-held misconception that the construction of roads and other infrastructure need always conflict with the conservation of species and habitat. At the Oregon Department of Transportation (ODOT) we are working hard to dispel this notion through the development of an innovative approach to mitigation and conservation banking; one that addresses multiple resources at the same time (including wetlands, water quality, fish and wildlife habitat, and recovery of endangered species) and one that we think will improve the way the agency meets its natural resource mitigation obligations.

Why change? Why not maintain the status quo? We have decided to change the way we do conservation and mitigation banking at ODOT because we think our new approach is better for ODOT, better for the state, and better for conservation. Currently, ODOT relies primarily upon project-specific mitigation to off-set unavoidable natural resource impacts. Mitigating at the project-by-project level means that site identification, property acquisition, design, permitting, construction, maintenance, and monitoring efforts are required for each and every individual mitigation site. This can be time consuming, unpredictable, and expensive, not to mention ineffective for the environment.

As a result of this cumbersome process, ODOT has many small mitigation sites that are challenging and disproportionately expensive to develop and maintain, and often result in little long-term ecological value. ODOT has therefore determined that a more comprehensive mitigation and conservation banking program would be an effective solution to this problem, and would provide mutual benefit, not only to ODOT and the state's taxpayers, but also for natural resources in the State of Oregon. The ODOT banking program will do this by streamlining permitting, reducing costs, improving environmental compliance efforts, and creating ecologically sustainable mitigation and conservation projects.

The new ODOT Banking Program is intended to “front-load” the process of developing and certifying individual mitigation banks. The certifying body for ODOT's banks is the Mitigation and Conservation Bank Review Team (MCBRT) and includes the following federal and state agencies: the U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (EPA), Federal Highways Administration (FHWA), U.S. Army Corps of Engineers (US ACE), National Marine Fisheries Service (NMFS), Oregon Department of State Lands (DSL), Oregon Department of Environmental Quality (DEQ), and the Oregon Department of Fish and Wildlife (ODFW). In Oregon, the MCBRT developed a statewide mitigation/conservation banking agreement that lays the foundation for ODOT's Banking Program, but does not specifically authorize individual bank sites. The agreement establishes the “sideboards” (or parameters) for developing individual bank sites and defines how ODOT will work collaboratively with state and federal agencies during bank creation.

In this way, the same MCBRT members that contributed to program development help ODOT to select and design individual mitigation banks so that the bank approval process is not the beginning of a process, but rather the culmination of an intensive collaborative effort. Certification of individual banks is streamlined by having up front agreement on program elements including priority habitats targeted for restoration, mitigation site selection criteria, the process for certifying banks, and credit/accounting methods.

## From Partnership to Action

In working with the MCBRT we use a watershed-based approach based on the following program elements: First, we have developed restoration goals we call “Ecoprovince Priorities” for each watershed (3<sup>rd</sup> field HUC<sup>1</sup>) in Oregon. These Ecoprovince Priorities are based on trends in habitat distribution and the ecological importance of focal habitats and species. The purpose of these goals is to further ODOT's ability to provide ecologically significant mitigation that truly contributes to the recovery of regionally important habitats and species.

Secondly, we have created a Habitat Assessment Method (HAM) that we believe provides an accurate and ecologically-sound means of measuring natural resource functions that will in turn allow for better accounting of both impacts and restoration efforts. We believe that this Habitat Assessment Method of debit and credit accounting is one of the most innovative program elements. It basically ensures that compensatory mitigation and conservation actions adequately address impacts to species, habitats as well as their values, and functions.

At its core, HAM is a functional assessment methodology that establishes the overall ecological value of the site in terms of "Habitat Value". Both impact and mitigation (bank) sites are evaluated with this method, thereby allowing a straightforward assessment and exchange of debits and credits. Essentially, the difference between the baseline and the projected future Habitat Value becomes the debit at an impact site or a credit at a mitigation (bank) site.

The foundation for HAM is the species and habitat associations documented in Wildlife-Habitat Relationships in Oregon and Washington (Johnson and O'Neil 2001). Habitat Value is determined by querying the Interactive Biodiversity Information System (IBIS) database and is based on the number and diversity of species that the habitat supports. One benefit of this methodology is that these associations have been developed for the entire Pacific Northwest, which makes it possible to transfer the banking framework being developed in Oregon to other parts of the region.

Habitat Value is the only credit sold at the bank. Because Habitat Value measures habitat quality and does not distinguish between different habitat types or regulated resources, sub-sets of habitat value or "backstops" specific to regulated resources such as wetlands and salmonids are also tracked. Since overall habitat value is the currency for bank transactions, a given credit may be used to address multiple resources and regulations. The backstops, meanwhile, ensure that regulatory obligations for specific resources and regulations (e.g. salmon or wetlands) are met.

### The Bottom Line

Using this new approach, ODOT has projected the need for approximately eight banks in the next five to ten years. It is important to note, however, that these banks are intended for ODOT use only and are not intended to compete with

private mitigation banks. Meanwhile, three bank sites are being designed and permitted concurrent with program development, these include: The Mirror Lake site in the western Columbia River Gorge (Portland area), which will provide wetlands and salmonid mitigation; The Santiam River and the East Fork Minnow Creek sites in the Willamette Valley, which will both address the protection of the Oregon chub, an endangered endemic fish, and provide some wetlands and salmonid mitigation. In addition, the Lost River (Klamath Falls area) and Crooked River (Prineville area) advanced wetland mitigation sites east of the Cascades will also be converted to bank sites.

In summary, ODOT's Banking Program will meet the Agency's mitigation needs, address resource and regulatory agency statutes and regulations, and increase efficiency in the wetland/conservation mitigation permitting and approval process by:

- Improving project delivery by increasing certainty and removing mitigation and associated permitting issues from the critical path of project development;
- Reducing the costs of mitigation over that of individual on-site mitigation by taking advantage of economies of scale;
- Meeting or exceeding state and federal compensatory mitigation and conservation requirements;



**ODOT's Banking Program will meet the Agency's mitigation needs, address resource and regulatory agency statutes and regulations, and increase efficiency in wetland/conservation mitigation permitting and approval**

- Focusing mitigation on ecosystem priority habitat and species, thereby providing greater ecological value;
- Implementing a Comprehensive Mitigation and Conservation Strategy (CMCS) that addresses multiple resources including wetlands, water quality, fish and wildlife habitat, and recovery of endangered species;
- Applying an innovative assessment methodology as an alternative to the standard acreage-ratio based approach to ensure that no net loss of wetland and species habitat (as well as their functions and values) occur; and
- Ensuring proper controls for monitoring, maintenance, long-term protection, and adaptive management are in place for regional bank sites.

Or, to put it another way, by using Ecoprovince Priorities for restoration and our new Habitat Assessment Method, by simultaneously mitigating for multiple resources and regulatory obligations at bank sites, and by working closely with a wide array of regulatory agencies, we believe that our mitigation will prove to be more cost effective and –just as important – more ecologically meaningful.

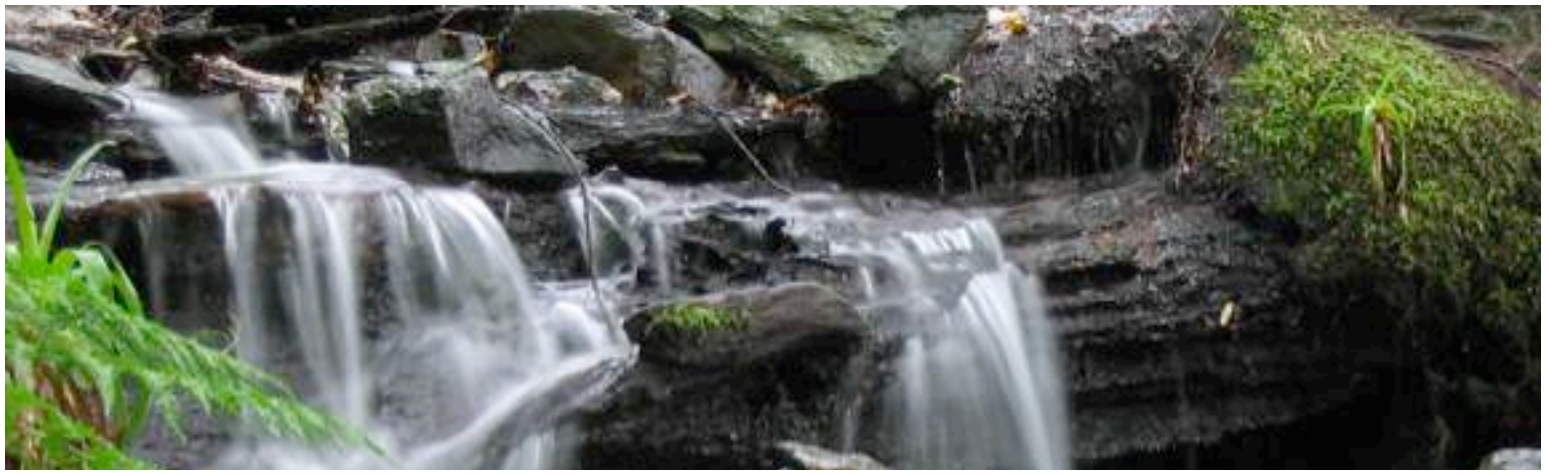
*Bill Warncke is the Mitigation and Conservation Program Coordinator for ODOT. He can be reached at (503) 986-3013, or by e-mail at [william.m.warncke@odot.state.or.us](mailto:william.m.warncke@odot.state.or.us)*

<sup>1</sup> H.U.C. is an acronym for Hydrologic Unit Codes. Hydrologic unit codes are a way of identifying all of the drainage basins in the United States in a nested four-level arrangement from largest (Regions) to smallest (Cataloging Units). Each area has been assigned a unique hydrologic unit code (HUC) consisting of eight digits based on these four fields. The first field of classification divides the nation into 21 major geographic areas. The second field of classification divides the 21 regions into 222 subregions. The third field of classification subdivides many of the subregions into accounting units. These accounting units nest within, or are equivalent to, the subregions.



**Stay informed, sign up for "Mitigation Mail", a monthly e-mail newsletter on conservation/mitigation banking: [www.ecosystemmarketplace.com](http://www.ecosystemmarketplace.com)**





# Stream Mitigation: Not Rocket Science?

By Amanda Hawa



The 9th National Mitigation & Conservation Banking Conference kicked off with a new Stream Mitigation Banking Workshop.

George Howard, vice president of Restoration Systems LLC, and Cynthia Robinson, president of Robinson Ecological Services, facilitated a 90-minute workshop about the opportunities and challenges associated with stream mitigation banking.

Both speakers expressed excitement about the economic and environmental promise of stream mitigation banking in the United States. Standing next to a map of North Carolina and gesturing like a weatherman, Howard pointed to the web of streams and rivers stretching from the Tennessee border to the Atlantic Ocean. Unlike wetlands, which are often concentrated in flood plains or coastal areas, Howard said, "There are streams everywhere." And where there are streams, the businessman reckoned, there are opportunities to make a buck while restoring ecosystems.

In particular, Howard cited a handful of factors driving his predicted expansion of stream mitigation banking: the widespread adoption of stream restoration standards; the emergence of a critical mass of trained experts; the demonstrated feasibility of mitigation banks; the innovative mitigation efforts of states like North Carolina; and, most importantly, new regulatory guidance.

The regulatory trend, reasoned Howard, is toward "in-kind" mitigation projects. In states like Georgia, for instance, stream losses can no longer be replaced by wetland restoration projects on a widespread scale. The U.S. Army Corps of Engineers' new draft wetlands regulations also express a clear preference for in-kind mitigation: "The proposed rule generally

requires wetland compensatory mitigation for wetlands losses, and stream compensatory mitigation for stream losses."

In particular, Robinson highlighted the opportunities she saw for stacking credits for stream mitigation with those for carbon sequestration and water quality in urban areas. "You can have backyard birds, you can have water-quality, you can have quality of life," she said. "That's my vision for the future."

Despite their enthusiasm for expanding stream mitigation banking, both workshop leaders also expressed a healthy respect for the challenges associated with making stream mitigation banks work. Nailing down the real estate required for a stream mitigation bank, they said, is extremely difficult since banks require long strips of land. "It doesn't come easy," said Robinson.

Regulators and bankers at the workshop all agreed that stream mitigation projects will fail without buy-in from local landowners. In urban areas, this means working closely with homeowners' associations and community planners. In rural areas, it generally means convincing agricultural producers either to sell their land or integrate their farming practices with the stated restoration aims of a conservation easement. According to Robinson, one of the first questions bankers need to ask themselves is, "Will the farmer 'give up' the stream?"

The answer in most cases is: not without a real financial motive. Securing the necessary real estate for a project thus makes stream mitigation banking expensive and limits profit margins across the board. "Streams are a 'much larger (albeit riskier opportunity) than wetlands," concluded Howard.

In deciding whether any given project is worth it, Robinson said the second question bankers should consider is whether or not a site is suitable for restoration. "Every district you go in has different rules," she said. "You really have to know what the rules are and what is an appropriate restoration site."

Robinson noted, for instance, that most districts don't award any more credits for streams with large drainage areas than they do for streams with much smaller drainage areas. Referring to the widely varied Standard Operation Procedures of different regulatory districts, she stressed, "Your SOP is what it's all about."

Speaking from the regulatory perspective, Alan Miller, project manager at the U.S. Army Corps of Engineers in Georgia, said stream mitigation projects can also be a complicated process for those enforcing the SOPs. "Stream restoration is not rocket science, it is far more difficult."

Even after you have selected an appropriate site for a stream mitigation bank and invested in the necessary real estate, Robinson said a steep learning curve remains. Flashing a picture of a biologist wading into gator-inhabited waters, Robinson explained how much work it can be to pull together baseline information about a stream. With a smile, she clicked next to a photo of kayakers paddling through a nearly completed stream restoration project. The stretch of water, she noted, had been a dirt field just months earlier.

The workshop's overall message, in fact, was well summarized by the two photos – stream mitigation banking is risky and tough, but often well worth it.

# Agenda for Today (Tuesday, April 25, 2006)

## 8:00 AM - 1:00 PM

Optional Field Trips:

### 1. Mud Slough Wetland Mitigation Bank.

Buses depart Hotel entrance at 8 a.m. Box lunch included.

### 2. Hillsboro Landfill.

Buses depart Hotel entrance at 8 a.m. Box lunch included.

## Noon - 4:00 PM

Exhibitor Set-up

## 1:00 PM - 3:00 PM

### U.S. Army Corps' IRT Training Workshop (Corps IRT staff only) (Galleria)

Facilitated by Mark Sudol, U.S. Army Corps of Engineers, and Robert Brumbaugh, Institute for Water Resources, U.S. Army Corps of Engineers.

This workshop is for Corps staff involved in the IRT process and will address the new guidance.

## 3:00 PM - 5:30 PM

### Regulators' Forum (Regulators only) (Galleria)

Facilitated by Robert W. Brumbaugh, Senior Policy Analyst, Water Resources Institute, U.S. Army Corps of Engineers

A gathering of regulators involved in mitigation and conservation banking throughout the United States in an effort to share their experiences and address special concerns to regulators.

## 3:00 - 5:30 PM

### Bankers' Forum and National Mitigation Banking Association Meeting (open session) (G. Ballroom II)

Facilitated by Craig Denisoff, President, NMBA

The National Mitigation Banking Association will hold its annual meeting, with the last part devoted to a forum that allows bankers to share experiences and address special concerns to bankers.

## 5:30 PM - 7:00 PM

### Welcome Reception in Exhibit Area

Hosted by Wildlands, Inc. and the National Mitigation Banking Association



## About the Ecosystem Marketplace



The Ecosystem Marketplace seeks to become the world's leading source of information on markets and payment schemes for ecosystem services; services such as water quality, carbon sequestration and biodiversity. We believe that by providing solid and trustworthy information on prices, regulation, science, and other market-relevant issues, markets for ecosystem services will one day become a fundamental part of our economic and environmental system, helping give value to environmental services and thereby helping conserve them.

## Staff

**Michael Jenkins** — Publisher

**Ricardo Bayon** — Director

[rbayon@ecosystemmarketplace.com](mailto:rbayon@ecosystemmarketplace.com)

**Amanda Hawn** — Editor

[ahawn@ecosystemmarketplace.com](mailto:ahawn@ecosystemmarketplace.com)

**Nathaniel Carroll** — Program Manager

[ncarrol@ecosystemmarketplace.com](mailto:ncarrol@ecosystemmarketplace.com)

**Beth Egan** — Contributor (US Forest Service)

The Ecosystem Marketplace is a project of:



"I'll be honest, Raymond. I really don't give a damn about the wetlands."

THE KATOOMBA GROUP'S

# Ecosystem Marketplace