

# **In-Lieu Fee Mitigation: Model Instrument Language and Resources**

**December 2009**



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# CHAPTER I: INTRODUCTION & BACKGROUND

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## Background

On April 10, 2008, the Department of the Army (DA) and U.S. Environmental Protection Agency (EPA) published a final rule governing compensatory mitigation authorized under DA permits issued under §404 of the Clean Water Act (33 U.S.C. 1344) and/or §§9 or 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401, 403). The rule constitutes the first time that the agencies have issued regulations – rather than non-mandatory guidance – on in-lieu fee mitigation. The federal agencies first addressed in-lieu fee mitigation in guidance issued on mitigation banking in 1995.<sup>1</sup> Additional

guidance specific to in-lieu fee mitigation was issued in 2000.<sup>2</sup>

The regulations require in-lieu fee programs approved on or after July 9, 2008 to secure approval for their instruments under the terms of the rule. Existing in-lieu fee programs approved before July 9, 2008 may continue to operate under their previous instruments until June 9, 2010, after which time they must either meet the new requirements or terminate operation. At the discretion of the district engineer (DE), in-lieu fee programs may secure an extension of up to three years – until June 9, 2013.<sup>3</sup>

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1 Department of Defense, Environmental Protection Agency, Department of Agriculture, Department of the Interior, and Department of Commerce. 1995. *Federal Guidance for the Establishment, Use and Operation of Mitigation Banks*. Federal Register. 60(228): 58605-58614.

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2 Department of the Army, Environmental Protection Agency, Fish and Wildlife Service, National Oceanic and Atmospheric Administration. 2000. *Federal Guidance on the Use of In-Lieu-Fee Arrangements for Compensatory Mitigation under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act*.

3 Compensatory Mitigation for Losses of Aquatic Resources, 73 Fed. Reg. 19,593, 19,594 (Apr. 10, 2008) [hereinafter Compensatory Mitigation Rule (2008)] (to be codified at 33 C.F.R. pt. 325). §332.8(v)(2).



In recent years, several studies have focused on the effectiveness of previous policy governing in-lieu fee mitigation, as well as the performance of specific programs.<sup>4</sup> This paper does not address past practices or program effectiveness, oversight, or enforcement. Rather, it describes the process that prospective in-lieu fee providers must undertake if they opt to seek approval for their programs, offers model language and examples for programs developing a new in-lieu fee instrument, and provides resources to prospective in-lieu fee sponsors.

The model language offered in this paper could be incorporated into in-lieu fee program instruments. It was developed using the best available information and uses examples from the approved and draft in-lieu fee instruments that were available as of December 2009. This

model language should not, however, be seen as a prescriptive approach to the development of in-lieu fee program instruments. The model language offered does not represent official guidance from federal agencies, nor does it eliminate the necessity of working closely with the appropriate Corps district and Interagency Review Team to seek approval for an in-lieu fee program.

## The Basics

The 2008 rule defines an *in-lieu fee program* as:

a program involving the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy compensatory mitigation requirements for DA permits. Similar to a mitigation bank, an in-lieu fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor. However, the rules governing the operation and use of in-lieu fee programs are somewhat different from the rules governing operation and use of mitigation banks. The operation and use of an in-lieu fee program are governed by an in-lieu fee program instrument.<sup>5</sup>

**In-lieu fee programs may only be sponsored by governmental agencies or non-profit natural resources management**

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4 See: Bendor, Todd, Joel Sholtes, and Martin W. Doyle. In press. "Landscape characteristics of a stream and wetland mitigation banking program." *Ecological Applications*. Washington, DC: Ecological Society of America; Wilkinson, Jessica. February 2009. "In-lieu fee mitigation: coming into compliance with the new Compensatory Mitigation Rule." *Wetlands Ecology and Management*. 17(1): 53; Dye Management Group. 2007. *Study of the merger of Ecosystem Enhancement Program and Clean Water Management Trust Fund*. Dye Management Group: Raleigh, NC. [http://www.nceep.net/pages/DYE\\_2007\\_EEP\\_CW-MTF\\_Study\\_Final\\_Report.pdf](http://www.nceep.net/pages/DYE_2007_EEP_CW-MTF_Study_Final_Report.pdf). (Last visited September 24, 2009); Wilkinson, Jessica, Roxanne Thomas, and Jared Thompson. June 2006. "The Status and Character of In-Lieu Fee Mitigation in the United States." Washington, DC: Environmental Law Institute [Hereinafter ELI (2006)]; U.S. General Accounting Office. May 2001. *Wetlands Protection: Assessments Needed to Determine Effectiveness of In-Lieu-Fee Mitigation*. Washington, DC: GAO. GAO-01-325.

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5 Compensatory Mitigation Rule (2008), §332.2.

organizations.<sup>6</sup> The Interagency Review Team (IRT, formerly Mitigation Bank Review Team, or MBRT) is the interagency group that reviews “documentation for the establishment and management of... in-lieu fee programs.”<sup>7</sup> The Corps serves as the chair of the IRT. Representatives from EPA, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration’s (NOAA) National Marine Fisheries Service (NMFS), the Natural Resources Conservation Service (NRCS), and “other federal agencies, as appropriate” may serve on the IRT. In addition, “representatives from tribal, state, and local regulatory and resource agencies” may serve on the team “where such agencies have authorities and/or mandates directly affecting, or affected by the establishment, operation, or use of the...in-lieu fee program.”<sup>8</sup> Often included are representatives from state wetland programs and state wildlife agencies. The rule states that the Corps must seek to include “all public agencies with a substantive interest in the establishment of the...in-lieu fee program,” but stipulates that the Corps “retains final authority over” the composition of the IRT.<sup>9</sup>

During review of the draft instrument, the Corps is required to “seek to resolve issues using a consensus based approach, *to the extent practicable...*”<sup>10</sup> However, the rule includes timelines for responding to applicants and meeting

these timelines takes precedence over reaching consensus. The rule stipulates that the Corps “alone retains final authority for approval of the instrument”<sup>11</sup> and the instrument may be approved without the signature of all of the IRT members.<sup>12</sup>

## Basic characteristics

In-lieu fee programs are distinguished from mitigation banks and other forms of compensatory mitigation by having *all* of the following six characteristics (some of these properties are shared by banks and project-specific compensatory mitigation). Definitions for each of the characteristics follow.

- In-lieu fee program instrument
- Review by interagency review team
- Geographic service area(s)
- Compensation planning framework
- In-lieu fee program account
- Allocation of advance credits

An *in-lieu fee program* instrument is “the legal document for the establishment, operation, and use of an in-lieu fee program.”<sup>13</sup>

An *Interagency Review Team* (IRT) is “an interagency group of federal, tribal, state, and/or local regulatory and resource agency representatives that reviews documentation for, and advises the district engineer on, the establish-

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6 Ibid.

7 Ibid., §332.8(b)(1).

8 Ibid., §332.8(b)(2).

9 Ibid.

10 Ibid., §332.8(d)(7). Emphasis added.

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11 Ibid., §332.8(b)(4).

12 Ibid., §332.8(b)(3).

13 Ibid., §332.2.

ment and management of a mitigation bank or an in-lieu fee program.”<sup>14</sup>

A *service area* is “the geographic area within which impacts can be mitigated at a specific mitigation bank or an in-lieu fee program, as designated in its instrument.”<sup>15</sup> It is also defined as “the watershed, ecoregion, physiographic province and/or other geographic area within which the...in-lieu fee program is authorized to provide compensatory mitigation required by DA permits.”<sup>16</sup>

A *compensation planning framework* is a plan, included in the in-lieu fee instrument that is used “to select, secure, and implement aquatic resource restoration, establishment, enhancement, and/or preservation activities.” The framework must “support a watershed approach to compensatory mitigation” and all of the compensation projects proposed by the in-lieu fee program must be consistent with the approved framework.<sup>17</sup>

An *in-lieu fee program account* is an account established by the program sponsor to track the fees accepted and disbursed. The account must track funds accepted from permittees separately from those accepted from other entities and for other purposes (i.e., fees arising out of an enforcement action, “such as supplemental environmental projects.”<sup>18</sup>)<sup>19</sup>

*Advance credits* are “any credits of an approved in-lieu fee program that are available for sale prior to being fulfilled in accordance with an approved mitigation project plan. Advance credit sales require an approved in-lieu fee program instrument that meets all applicable requirements including a specific allocation of advance credits, by service area where applicable. The instrument must also contain a schedule for fulfillment of advance credit sales.”<sup>20</sup>

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14 Ibid.

15 Ibid.

16 Ibid., §332.8(d)(6)(ii)(A).

17 Ibid., §332.8(c).

18 Ibid., §230.93(g).

19 Ibid., §332.8(i).

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20 Ibid., §332.2.

# CHAPTER II: PROCESS

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The steps that are required for those seeking approval for an in-lieu fee program are described in this section, as are the components of each review stage. One of the new requirements for in-lieu fee programs is that they go through two rounds of IRT review and two rounds of public review and comment in the in-lieu fee program approval process: during development of the instrument and prior to approval of specific projects.

## Preliminary Review/Draft Prospectus

The first step towards seeking program approval is the submission of a prospectus to the IRT for review and comment. However, the rule strongly recommends that sponsors submit a draft prospectus to the Corps for initial “comment and consultation.”<sup>21</sup> If the sponsor chooses to submit a draft prospectus, the Corps and IRT must provide the sponsor with comments within 30 days.

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21 Ibid., §332.8(d)(3).

This phase of the process – from the time the sponsor submits a draft prospectus to when the Corps provides the sponsor with comments from the IRT – must be completed in no more than 30 days.

## Prospectus

The prospectus for all proposed in-lieu fee programs must include the following **eight elements**:

1. Objectives
2. How the in-lieu fee program will be established and operated
3. Proposed service area(s)
4. Need and technical feasibility
5. Ownership arrangements and long-term management strategy
6. Sponsor qualifications
7. Compensation planning framework
8. Description of program account

After receiving a complete prospectus, the Corps has 30 days to provide public

notice of the proposed program. The public comment period is 30 days. The Corps is responsible for circulating all of the comments received from the public to other members of the IRT.<sup>22</sup> The Corps and the IRT “may” also provide the sponsor with comments at this time.<sup>23</sup>

After the public comment period ends, the Corps is required to review all of the comments received (presumably from the public and other IRT members) and must provide the sponsor with an “initial evaluation” within 30 days. The initial evaluation is a written determination stating whether or not the Corps believes that the proposed project has “the potential...to provide compensatory mitigation for DA permits.”<sup>24</sup> The Corps must either inform the sponsor agency/organization that it may submit a draft instrument<sup>25</sup> or that the prospectus “does not have the potential for providing appropriate compensatory mitigation for DA permits.” In the latter case, the sponsor may choose to revise the prospectus and go through the public review and comment again, or choose not to seek program approval.<sup>26</sup>

This phase of the process – from the time the sponsor submits a complete prospectus to when the Corps provides the sponsor with the initial evaluation – must be completed in no more than 90 days.

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22 Ibid., §332.8(d)(4).

23 Ibid.

24 Ibid., §332.8(d)(5).

25 Ibid., §332.8(d)(5)(ii).

26 Ibid., §332.8(d)(5)(iii).

## Draft Instrument

If the Corps determines that the sponsor may proceed with submission of a draft instrument, the prospective sponsor may choose to do so or not. The rule does not put a time limit on how long the sponsor has to develop and submit the draft instrument. Once the draft instrument is submitted, however, the Corps must inform the sponsor whether or not the draft instrument is complete within 30 days.

The draft instrument for all proposed in-lieu fee programs must include the following **nine elements**.<sup>27</sup> Each element is described fully in Chapter III.

1. Service area
2. Accounting procedures
3. Provision stating legal responsibility to provide compensatory mitigation
4. Default and closure provisions
5. Reporting protocols
6. Compensation planning framework
7. Advance credits
8. Method for determining project-specific credits and fees & draft fee schedule
9. In-lieu fee program account

In addition, two additional elements may be included in the draft instrument; if not included in the draft instrument, they must be included in the project-specific mitigation plan(s).<sup>28</sup>

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27 Ibid., §§332.8(6)(ii) et seq. and 332.8(6)(iv) et seq.

28 Ibid., §332.8(u)(2)-(3).

10. Transfer of long-term management responsibilities
11. Financial arrangements for long-term management
12. Finally, the draft instrument must contain any other information “deemed necessary by the district engineer.”<sup>29</sup>

The compensation planning framework (Section 6, above) itself must include ten elements. Each element is described fully in Chapter III in the “Compensation Planning Framework” section. These **ten elements** are:

1. Geographic service area(s)
2. Description of threats
3. Analysis of historic resource loss
4. Analysis of current resource conditions
5. Goals and objectives
6. Prioritization strategy
7. Preservation justification
8. Description of stakeholder involvement
9. Long-term protection and management strategies
10. Strategy for periodic evaluation and reporting

Once the Corps notifies the sponsor that the draft instrument is complete, the IRT begins its 30-day comment period. Following the comment period, the Corps has 60 days to review the draft, during which time it must “seek to resolve issues using a consensus based approach, *to the extent practicable* while

still meeting the decision-making time frames” specified in the rule.<sup>30</sup> Following this review and resolution phase, the Corps must notify the sponsor of whether or not the draft instrument is acceptable and, if not, what changes are needed.

This phase of the process – from the time the sponsor submits a complete draft instrument to when the Corps provides the sponsor with the initial evaluation – must be completed in no more than 90 days.

## Final Instrument

After receiving notice from the Corps about whether or not the draft instrument is “generally acceptable,” the sponsor may submit a final instrument for program approval. The final instrument must include supporting documentation that explains how the final document addresses the comments provided by the IRT. Within 30 days of receiving the final instrument, the district engineer must “notify the IRT members whether or not he intends to approve the instrument...”<sup>31</sup> If any IRT members object to the Corps’ decision, the agency(ies) have 45 days from the time the final instrument was received to make a formal objections through the dispute resolution process (see §332.8(e)).<sup>32</sup> Following this 45-day period, the Corps must notify the sponsor of its final decision.

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29 Ibid., §332.8(d)(6)(ii)(F).

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30 Ibid., §332.8(d)(7).

31 Ibid., §332.8(d)(8).

32 Ibid.

The final instrument for all proposed in-lieu fee programs must include the same **nine elements** as those outlined above for the draft instrument. Each element is described fully in Chapter III. The final instrument must be signed by the program sponsor and the district engineer, at a minimum, before the program can be used to provide compensatory mitigation for permits.<sup>33</sup> The other members of the IRT may choose to sign the instrument as an indication of their agreement with the terms of the instrument.<sup>34</sup> Alternatively, IRT members may submit a letter expressing concurrence with the instrument.<sup>35</sup>

This phase of the process – from the time the sponsor submits a complete final instrument to when the Corps informs the sponsor of whether or not it intends to approve the instrument – must be completed in no more than 45 days.

Although it is not specifically addressed in the rule, there may be instances when the program sponsor opts to submit only a draft instrument, rather than a prospectus followed by a draft instrument. This may be particularly relevant if the in-lieu fee program was approved and operating before the mitigation rule was released and had many of the elements in place that are required under the 2008 rule. The prospective program sponsor should, of course, discuss the possibility for such an approach with the Corps well in advance of preparing the draft instrument. In such cases, the

Corps may consider the draft instrument as a surrogate for the prospectus. If all of the elements required for a complete prospectus are included in the draft instrument, the Corps may issue a public notice indicating the availability of the draft instrument for review and comment. The notice would be issued within 30 days of receiving the complete draft instrument, rather than the complete prospectus.

## Summary

From the time the sponsor submits the prospectus to when the Corps must inform the sponsor of whether or not it intends to approve the instrument the Corps and IRT have up to, but not more than, 225 days to undertake their federal review. This time frame is based on the assumption that there are no issues that would require the Corps to extend the timeframes for review.<sup>36</sup> The regulatory review clock stops each time drafts are returned back to the sponsor and it does not start again until the sponsor submits the next, complete set of documents. The entire process can take substantially more than 225 days if the sponsor requires a significant amount of time to prepare documents and respond to the Corps' information requests, if any of the deadline extension provisions are invoked by the Corps,<sup>37</sup> or if the dispute resolution process is initiated.<sup>38</sup>

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33 Ibid., §332.8(a)(1).

34 Ibid., §332.8(b)(3).

35 Ibid.

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36 The Corps may extend the deadlines in §§332.8(d) and (e) in a variety of cases discussed in §332.8(f) et seq.

37 Compensatory Mitigation Rule (2008), §332.8(f).

38 Ibid., §332.8(e).

### Compensatory Mitigation Rule Timeline for Bank or ILF Instrument Approval\*

		Event	# of Days**			
<b>Phase I</b>		<b>Optional Preliminary Review of Draft Prospectus</b>	30	DE provides copies of draft prospectus to IRT and will provide comments back to the sponsor within 30 days.		
	<b>Sponsor Prepares and Submits Prospectus</b> ~DE must notify sponsor of completeness w/in 30 days of submission~					
<b>Phase II</b>	Day 1**	<b>Complete Prospectus Received by DE</b>				
	Day 30	Public notice must be provided within 30 days of receipt of a complete prospectus	30			
	Day 60	30-Day Public Comment Period	30			
	Day 90	DE must provide the sponsor with an initial evaluation letter within 30 days of the end of the public comment period.	30	15	DE distributes comments to IRT members and sponsor within 15 days of the close of the public comment period.	
<b>Sponsor Considers Comments, Prepares and Submits Draft Instrument</b> ~DE must notify sponsor of completeness w/in 30 days of submission~						
<b>Phase III</b>	Day 1	<b>Complete Draft Instrument Received by IRT Members</b>				
	Day 90	30-day IRT comment period begins 5 days after DE distributes draft instrument to IRT members	30	90	Within 90 days of the receipt of a complete draft instrument by IRT members, the DE must notify the sponsor of the status of the IRT review.	
		DE discusses comments with IRT and seeks to resolve issues ~ # of days variable~	60			
<b>Sponsor Prepares Final Instrument</b> ~Sponsor provides copies to DE and all IRT members~						
<b>Phase IV</b>	Day 1	<b>Final Instrument Received by DE &amp; IRT</b>				
	Day 30	DE must notify IRT members of intent to approve/not approve instrument within 30 days of receipt.	30	45	IRT members have 45 days from submission of final instrument to object to approval of the instrument and initiate the dispute resolution process.	
		Remainder of time for initiation of dispute resolution process by IRT members	15			
Day 45	<b>INSTRUMENT APPROVED/NOT APPROVED, or DISPUTE RESOLUTION PROCESS INITIATED</b>					

EPA/Corps draft 4/02/08

Total Required Federal Review (Phases II-IV): ≤225 Days

\*Timeline also applies to amendments

\*\*The timeline in this column uses the maximum number of days allowed for each phase.



## Project Approval

The process above relates only to the review and approval of in-lieu fee *instruments*. In-lieu fee providers must engage in another, separate review process for each proposed in-lieu fee project. In other words, every time the sponsor of an approved in-lieu fee program would like to implement a new mitigation project or add new acreage to an existing project, they must submit a project mitigation plan, go through a public review and comment phase, and go through formal IRT review. More on this process is covered in the rule under §332.4(c)(1)(iii) and §332.8(i)(2).

An in-lieu fee project mitigation plan, as opposed to the in-lieu fee instrument, must address the following **twelve elements**. The mitigation plan and the elements listed below are not discussed at length in this paper.

1. Objectives
2. Site selection (further described in §332.3(d))
3. Site protection instrument (further described in §332.7(a))
4. Baseline information
5. Determination of credits (further described in §332.3(f))
6. Mitigation work plan
7. Maintenance plan
8. Performance standards (further described in §332.5)
9. Monitoring requirements (further described in §332.6)

10. Long-term management plan (further described in §§332.7 and 332.8(u))
11. Adaptive management plan (further described in §332.7(c))
12. Financial assurances (further described in §332.3(n))

# CHAPTER III: MODEL INSTRUMENT

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The draft and final in-lieu fee instruments must contain the following **nine elements**:

1. Service area(s)
2. Accounting procedures
3. Provision stating legal responsibility for providing compensatory mitigation
4. Default and closure provisions
5. Reporting protocols
6. Compensation planning framework
7. Specification of initial allocation of advance credits
8. Methodology for determining project-specific credits and fees
9. Description of in-lieu fee program account

In addition, two additional elements *may* be included in the draft instrument:<sup>39</sup>

10. Provisions for transfer of long-term management responsibilities

11. Financial arrangements for long-term management

Finally, the draft instrument must contain any other information “deemed necessary by the district engineer,”<sup>40</sup> as well the signatures of the program sponsor, the district engineer, and, if they see fit, the other members of the IRT.<sup>41</sup>

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39 Ibid., §§332.8(u)(2) and 332.8(u)(3).

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40 Ibid., §332.8 (d)(6)(ii)(F).

41 Ibid., §§332.8(a)(1) and 332.8(b)(3).

## 1. Service Area

- “A complete prospectus includes...The proposed service area.” (§332.8(d)(2)(iii))
- “For...in-lieu fee programs, the draft instrument must include... A description of the proposed geographic service area of the... in-lieu fee program.” (§332.8(d)(6)(ii)(A))
- “An in-lieu fee program...instrument may have multiple service areas governed by its instrument (e.g., each watershed within a state or Corps district may be a separate service area under the instrument);” (§332.8(d)(6)(ii)(A))

### Background and definitions

The proposed service area(s) must first be described in the prospectus<sup>42</sup> and then again in the draft instrument.<sup>43</sup> As a result, the program sponsor has the opportunity to get public feedback and comments, as well as two rounds of review from the IRT, before finalizing the service area language in the final instrument. The proposed service area(s) are likely to be described in greater detail in the instrument than in the prospectus or draft instrument.

The in-lieu fee prospectus, draft instrument, and final instrument must specify the service area – the watershed, ecoregion, physiographic province, or other geographic area – within which the in-lieu fee program is authorized to provide compensatory mitigation for DA permits. The rule first defines service area as: “the geographic area within which impacts can be mitigated at a specific mitigation bank or an in-lieu fee pro-

gram, as designated in its instrument.”<sup>44</sup> Later, service area is defined as: “the watershed, ecoregion, physiographic province and/or other geographic area within which the...in-lieu fee program is authorized to provide compensatory mitigation required by DA permits.”<sup>45</sup>

The draft instrument must also document the “basis for the proposed service area...”<sup>46</sup> This may be a simple statement describing why the specific service areas were selected. For example, the sponsor might state that the specific service area was chosen because of its basis in existing state laws and programs or based on environmental considerations.

### Background and definitions: scale of the service area(s)

The rule states that the service area must be “appropriately sized to ensure that the aquatic resources provided will effectively compensate for adverse

42 Ibid., §332.8(d)(2)(iii).

43 Ibid., §332.8(d)(6)(ii)(A).

44 Ibid., §332.2.

45 Ibid., §332.8(d)(6)(ii)(A).

46 Ibid.

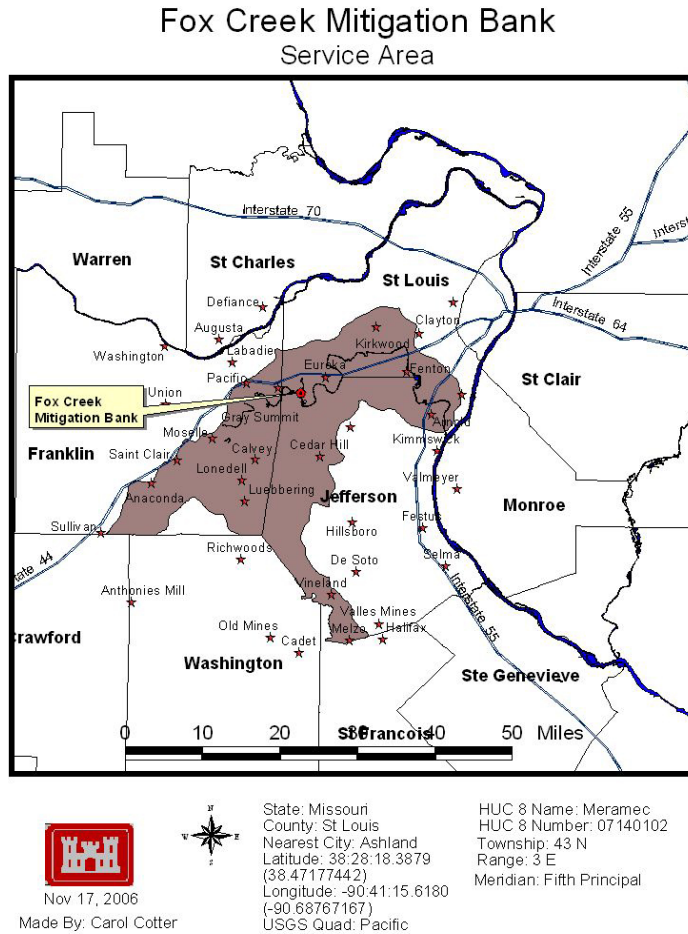


Figure 1: Location and service area for the Fox Creek Mitigation Bank, U.S. Army Corps of Engineers, St. Louis District environmental impacts across the entire service area.”<sup>47</sup> Although the rule does not specify what size or scale of watershed is appropriate, it suggests that in urban areas a U.S. Geological Survey (USGS) 8-digit hydrologic unit code (HUC) or smaller may be appropriate but that several contiguous 8-digit HUCs or a 6-digit HUC may be appropriate in rural areas.<sup>48</sup>

47 Ibid.

48 U.S. Geological Survey. “Hydrologic Unit Maps.” <http://water.usgs.gov/GIS/huc.html>. (Last visited September 15, 2009.)

USGS HUCs are the most commonly used geographic unit used to define a service area. In a recent unpublished survey, 14 of the 38 Corps districts indicated that the primary service area boundary used for compensatory mitigation is the 8-digit HUC, while another 14 districts used more than one unit that included HUCs in combination with other watershed/ecoregional classification (e.g., the Rock Island District uses the 8-digit HUC, 6-digit HUC, or Ecological Drainage Unit).<sup>49</sup>

## Background and definitions: locally developed standards

The rule states that “Delineation of the service area must also consider any locally-developed standards and criteria that may be applicable.”<sup>50</sup>

Many Corps districts have established service areas for a variety of purposes, including determining mitigation banks service areas and conforming to service areas established by state wetland laws. Prospective in-lieu fee sponsors should contact their appropriate Corps district to determine if the district or an associated state (e.g., Oregon, Washington), have adopted guidance on the establish-

49 Womble, Philip and Martin Doyle. Unpublished research. “Setting Geographic Service Areas for Sound Ecological and Economic Performance in Wetland Mitigation Banking.” UNC-Chapel Hill.

50 Compensatory Mitigation Rule (2008), §332.8(d)(6)(ii)(A).

## **BOX 1: Hydrologic Unit Codes – Background & Examples**

The USGS divides the country up into “hydrologic units” that are nested within each other. From largest to smallest, the eight levels of hydrologic units are as follows:

- At the largest level of classification, the country is divided into 22 **regions** (2-digit HUC). These units average 177,560 square miles and generally encompass the drainage area of a major river, such as the Missouri region, or the combined drainage areas of a series of rivers, such as the Texas-Gulf region.
- The second level of classification further divides the 21 regions into 222 **subregions** (4-digit HUC). A subregion averages 16,800 square miles and may capture the area drained by a river system, a reach of a river and its tributaries in that reach.
- The third level of classification subdivides many of the subregions into **basins** (6-digit HUC). These 379 hydrologic units average 10,596 square miles.
- The fourth level of classification is the **subbasin** (8-digit HUC). There are 2,267 sub-basins in the country that average 703 square miles.
- The fifth level of classification is the **watershed** (10-digit HUC). The nation's 22,000 watersheds average 40,000 - 250,000 acres.
- The sixth and final level of classification is the **subwatershed** (12-digit HUC). These 160,000 units average 10,000 – 40,000 acres.

Each hydrologic unit is assigned a 2-12 digit hydrologic unit code (HUC), depending on the level of classification (i.e., a 2-digit HUC is assigned a 2-digit number and a 12-digit HUC is assigned a 12-digit number).

For example, the Ohio Region (a 2-digit HUC) is assigned a two digit code (05). The region includes the drainage of the Ohio River Basin, excluding the Tennessee River Basin, and includes parts of Illinois, Indiana, Kentucky, Maryland, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia. The Ohio Region is also represented by 14 sub-regions (4-digit HUCs) that are each assigned a four-digit code (0501, 0502, 0504...0514). These 14 sub-regions range in size from 5,330 to 32,600 square miles. One of these sub-regions, the Kentucky-Licking (HUC-0510) is 10,500 square miles. It includes 2 accounting units (6-digit HUCs) that are each assigned a six-digit code (051001 and 051002) that are 3,600 and 6,870 square miles, respectively. The larger of these two, the Kentucky River Basin (HUC-051002), includes 5 cataloging units (8-digit HUCs) that are each assigned an eight-digit code (05100201, 05100202, 05100203...) that range in size from 552-3,200 square miles. The South Fork Kentucky Cataloging Unit (HUC-05100203) is 741 square miles.

*Sources: Lists and maps of the hydrologic units are available from the USGS. A text-formatted list of hydrologic unit names and numbers is available in the original format ([http://water.usgs.gov/GIS/huc\\_name.html](http://water.usgs.gov/GIS/huc_name.html)) or in tab-delimited format ([http://water.usgs.gov/GIS/huc\\_rdb.html](http://water.usgs.gov/GIS/huc_rdb.html)). For more information on ordering maps, see: “Ordering U.S. Geological Survey Products,” [http://ask.usgs.gov/to\\_order.html](http://ask.usgs.gov/to_order.html). (Last visited December 28, 2009).*

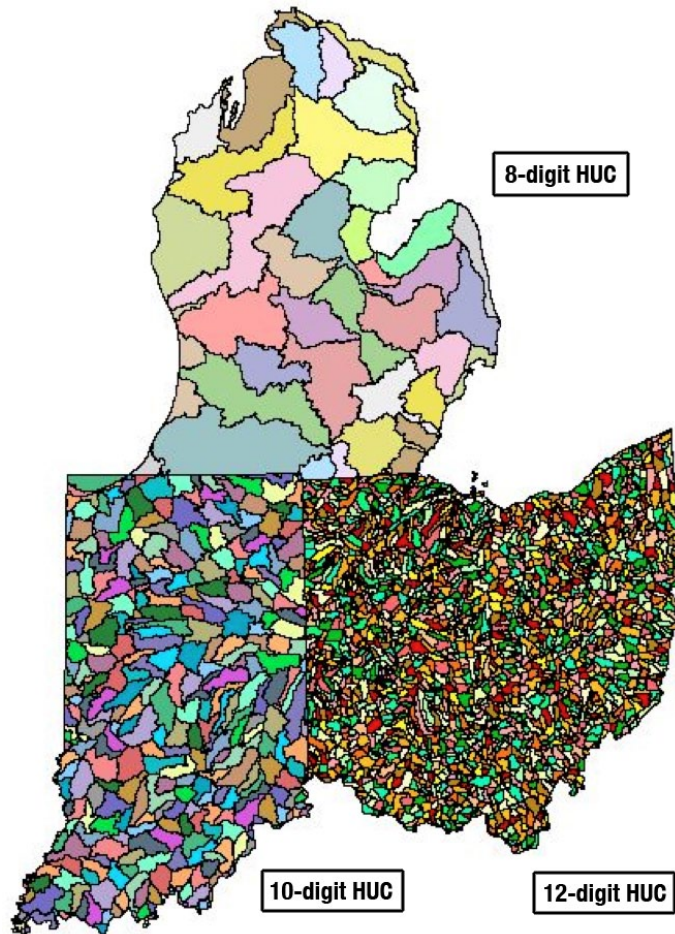


Figure 2: U.S. Geological Survey Hydrologic Unit Code Maps

ment of service areas for banks or in-lieu fee programs within their jurisdiction.

## Examples of designated service areas

Many of the pre-2008 rule in-lieu fee instruments specified designated service areas. Eleven programs used established watershed boundaries; five of these used USGS HUCs and five used watershed boundaries established by state programs. For example, the instrument for the Tennessee Stream Mitigation

Program (2002) stated that the program would prioritize project selection by giving preference for projects that occur in the same “Level III Ecoregion...6 digit HUC, or, ideally, same 8 digit HUC as the impacts.”<sup>51</sup>

Other state-designated service areas include Washington State’s watershed boundaries, known as Water Resource Inventory Areas (WRIA). Established for use in the wetland mitigation banking context,<sup>52</sup> the regulations list the state’s sixty-two major watershed basins.<sup>53</sup> The WRIA boundaries were first developed by the state’s natural resource agencies in 1970 and were updated in 1998 and 2000.<sup>54</sup>

In 2006, the New Hampshire legislature established the New Hampshire Aquatic Resource Mitigation Fund (the ARM Fund) to provide an alternative to site-specific wetland

51 Tennessee Wildlife Resources Foundation. 2002. TWRP, LLC “In Lieu Fee” Stream Mitigation Program Memorandum of Agreement. Signatories: Tennessee Department of Environment and Conservation, U.S. Army Corps of Engineers Memphis District, U.S. Army Corps of Engineers Nashville District, Tennessee Valley Authority, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Tennessee Wildlife Resources Agency, and Tennessee Wildlife Resources Foundation, LLC. §3.2(d). p. 6.

52 WAC 173-700-301(3).

53 WAC 173-500-040.

54 Washington Department of Ecology. “Water Resource Inventory Area (WRIA) Maps.” <http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm>. (Last visited December 8, 2009.)

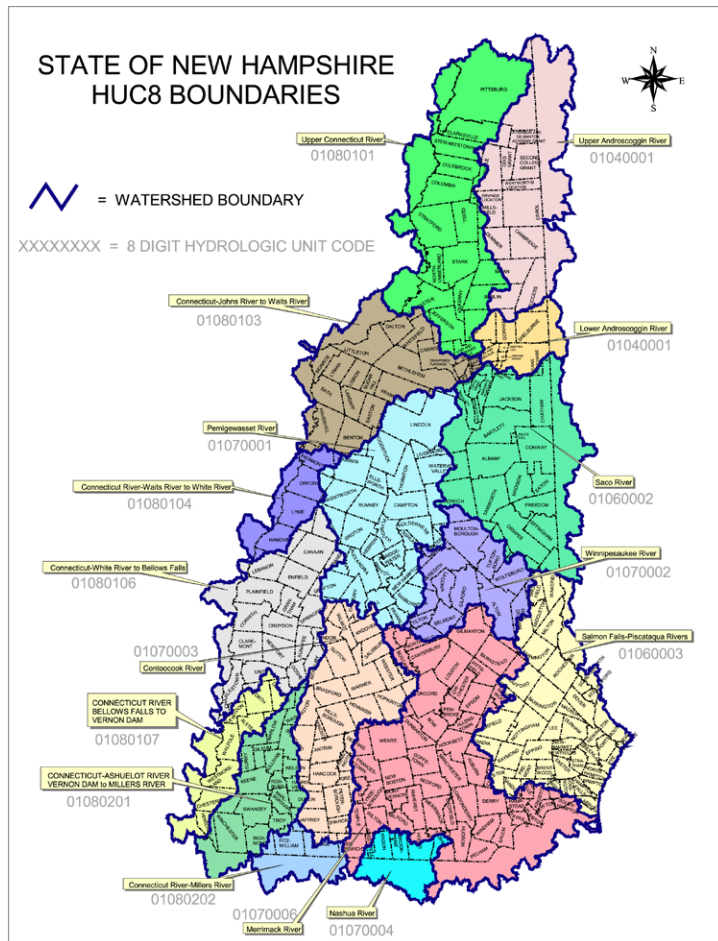


Figure 3: State of New Hampshire HUC 8 Boundaries

mitigation.<sup>55</sup> The statute states that “No project shall be funded with in lieu payments from losses that occurred outside the hydrologic unit code 8 watershed, as developed by the United States Geological Survey, in which the project is located” (see Figure 3).<sup>56</sup>

Other pre-2008 programs used watersheds defined by state programs that have been designated for other purposes, such as water quality monitoring. For example, the Montana Department of

55 RSA 482-A:28. [<http://www.gencourt.state.nh.us/rqa/html/NHTOC/NHTOC-L-482-A.htm>]

56 RSA 482-A:31, III(c).

Fish, Wildlife and Parks’ Wetlands Legacy Trust Fund used “Major Montana Watershed Basins” that were designated by the Montana Department of Transportation.<sup>57</sup> The interagency review team in Georgia adopted service areas to support the development of wetland and stream mitigation banks. The service areas are based on the “State of Georgia Hydrologic Unit Map.”<sup>58</sup> The Corps Wilmington District has adopted the 8-digit USGS HUC for mitigation banks.<sup>59</sup>

The draft compensation planning framework for the Southeast Alaska Land Trust In-lieu Fee Program (2009)<sup>60</sup> states that the service area for the program:

encompasses the Trust’s existing program area of Southeast Alaska. Common usage describes Southeast Alaska as a coastal ecosystem located between 55 and 60 degrees latitude, extending

57 Montana Department of Environmental Quality. “Watershed Approach.” <http://www.deq.state.mt.us/wqinfo/SWP/watershedApproach.asp>. (Last visited November 5, 2009.)

58 Georgia Mitigation Bank Review Team. Undated. “Draft, Mitigation Bank Service Areas.” <http://www.sas.usace.army.mil/MBSA.htm>. (Last visited September 21, 2009.)

59 U.S. Army Corps of Engineers, Wilmington District. “Mitigation Banks.” <http://www.saw.usace.army.mil/wetlands/Mitigation/mitbanks.html>. (Last visited September 21, 2009.)

60 Southeast Alaska Land Trust. 2008. Draft Compensation Planning Framework.

about 500 miles from the Canadian border (south of Ketchikan) northwest to Yakutat Bay and roughly 120 mi in width. Within this vast region, [South-east Alaska Land Trust (SEAL Trust)] will rely on existing delineations based on watersheds to gather aquatic resource information and provide its [in-lieu fee (ILF)] Program services.

Based on major watersheds, the entire state of Alaska is divided into six sub-regions, as delineated by the U.S. Geological Service (Figure 1) with designated 4-digit Hydrologic Unit Codes (HUCs) 1901 through 1906. Southeast Alaska (1901) is further divided into four 6-digit HUCs (190101 through 190104) with each representing a group of related watersheds. Finally, Southeast Alaska is further subdivided into twelve 8-digit HUCs (Figure 1). Statistics for each of the 12 watersheds delineated by USGS are shown in Table 2. The service area for the SEAL Trust ILF Program is most of sub-region 1901, and includes all watersheds east of Icy Bay. The USGS water resources data available for Southeast Alaska is organized and accessible according to the HUC delineation.

### **North Carolina Ecosystem Enhancement Program**

**The draft instrument for North Carolina's Ecosystem Enhancement Program states:**

[North Carolina Ecosystem Enhancement Program (NCEEP)] agrees to provide mitigation for permitted impacts within the same 8-digit catalog

unit (CU) (as defined by USGS) in which the impact occurs unless the DE, in consultation with the IRT, has agreed to an alternative.<sup>61</sup>

### **Sample language**

The geographic service area for the (ILF Program) is defined as (specify the geographic unit). (Program Sponsor) will provide compensatory mitigation for permitted impacts within the same geographic service area in which the impacts occurs unless the district engineer, in consultation with the IRT, has agreed to an exemption. [Reference and include a map if possible.] This service area was selected because (Program Sponsor), in consultation with the district engineer, has concluded that the scale is appropriate to ensure that the projects selected will be able to effectively compensate for adverse environmental impacts across the entire service area. (Program Sponsor) will not accept fees from permittees in watersheds in which (Program Sponsor) has been unable to identify appropriate mitigation. Individual projects will be proposed for specific service areas in project-specific mitigation plans.

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61 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.



## 2. Accounting Procedures

- “For...in-lieu fee programs, the draft instrument must include...Accounting procedures;” (§332.8(d)(6)(ii)(B))

### Background and definitions

The section of the instrument regarding accounting procedures must first be included in the draft instrument.<sup>62</sup> As a result, the program sponsor will have the opportunity to consider feedback from the IRT before finalizing the accounting procedures in the instrument.

The term “accounting procedures” is not explicitly defined in the rule, but generally refers to the program sponsors’ system for tracking credit production, credit transactions, and financial transactions among sponsors and permittees.<sup>63</sup> The in-lieu fee program instrument must include a provision that requires the sponsor to establish and maintain an annual report ledger and individual ledgers. The credits and financial transactions must be tracked not only on a programmatic basis (i.e., the number of credits available for the entire program and the total amount of funds accepted and expended by the program), but for each individual compensation project undertaken by the program sponsor (i.e., the number of credits generated for each individual project and the amount of funds accepted and expended for each individual project) (see Section 7, “Advance Credits,” for a discussion of released credits

and Section 9, “In-Lieu Fee Program Account,” for a full discussion of how credits and financial transactions should be tracked).<sup>64</sup>

### Examples of accounting procedures

Language requiring *establishment* of the program account should be provided in this section. Section 9 of the instrument, “In-Lieu Fee Program Account,” on the other hand, should *describe* how the program account operates. Many of the existing, proposed, draft, and approved in-lieu instruments include language regarding accounting procedures in the program account section. Please see Section 9 of this report for examples of this language.

### Sample language

(Program Sponsor) shall establish and maintain a system for tracking the production of credits, credit transactions, and financial transactions between (Program Sponsor) and permittees. Credit production, credit transactions, and financial transactions must be tracked on a programmatic basis (i.e., the number of available credits for the entire program by service area) and separately for each individual project.

<sup>62</sup> Compensatory Mitigation Rule (2008), §332.8(d)(6)(ii)(B).

<sup>63</sup> Ibid., Preamble p. 19663.

<sup>64</sup> Ibid., §332.8(p)(2).

### 3. Provisions Stating Legal Responsibility to Provide Compensatory Mitigation

- “For...in-lieu fee programs, the draft instrument must include...A provision stating that legal responsibility for providing the compensatory mitigation lies with the sponsor once a permittee secures credits from the sponsor;” (§332.8(d)(6)(ii)(C))

#### Background and definitions

The section of the instrument regarding legal responsibility is first included in the draft instrument.<sup>65</sup> As a result, the program sponsor will have the opportunity to consider feedback from the IRT before finalizing this section of the instrument.

Mitigation banks and in-lieu fee programs are commonly referred to as “third party” mitigation mechanisms because, by definition, once a permittee buys credits from a bank or makes a payment to an in-lieu fee provider, the legal responsibility for fulfilling its compensation requirements transfers from the permittee to the third party. Although in-lieu fee programs have been encouraged to include explicit provisions about legal responsibility since 2000,<sup>66</sup> prior to 2008, in-lieu fee programs inconsistently included such language.

The 2008 rule requires all in-lieu fee instruments to include a provision that states that the legal responsibility for providing compensatory mitigation lies with the sponsor once the permittee

secures the credits from the sponsor.<sup>67</sup> In-lieu fee program instruments must “clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation project(s).”<sup>68</sup> The instrument must also contain a provision stating that the sponsor agrees to “assume the responsibility for a permittee’s compensatory mitigation requirements, once that permittee has secured the appropriate number and resource type of credits from the sponsor and the district engineer has received the documentation...”<sup>69</sup> This documentation “may consist of a letter or form signed by the sponsor, with the permit number and a statement indicating the number and resource type of credits that have been secured from the sponsor.”<sup>70</sup>

The legally enforceable transfer of responsibility is established by: 1) the approved in-lieu fee instrument that includes the legal responsibility provision; and 2) the receipt by the district engineer of documentation that confirms that the sponsor has accepted the re-

65 Ibid., §332.8(d)(6)(ii)(C).

66 ILF Guidance (2000), § IV.A.2.

67 Compensatory Mitigation Rule (2008), §332.8(d)(6)(ii)(C).

68 Ibid., §332.3(l)(2).

69 Ibid.

70 Ibid., §332.3(l)(3).

sponsibility for providing the required compensatory mitigation.<sup>71</sup>

Appendix B includes a sample letter developed by the Oregon Department of State Lands for the state's in-lieu fee program to use to document that credits have been secured from the sponsor and that legal responsibility has transferred from the permittee to the sponsor.

## Examples of provisions stating legal responsibility

Oregon Statewide Fee-in-Lieu Instrument  
The in-lieu fee instrument for the Oregon Statewide Fee-in-Lieu program states:

The responsibility to provide compensatory mitigation remains with the permittee unless and until credits are purchased from the [Fee-in-Lieu (FIL)] Program. Upon Corps approval of purchase of credits from the FIL Program, the permittee may contact [the Department of State Lands (DSL)] to secure the necessary amount and resource type of credits, as outlined in DA permit conditions. Each Section 404 authorization that includes a special condition requiring purchase of credits from the FIL program will include a requirement that DSL certify the transfer of responsibility via written communication to the permittee and the Corps. Certifications will outline the Corps permit number and state the number and resource type of credits that have been sold to the permittee (Exhibit E). A copy of each certificate will be

retained in the administrative and accounting records for the FIL Program Instrument. Debits will be reflected in annual accounting reports as outlined in Section VIII.

DSL is responsible for fulfilling mitigation requirements for authorized activities that utilize the FIL Program. This responsibility will remain with DSL for individual authorizations until the project from which credits were purchased is closed.<sup>72</sup>

North Carolina Ecosystem Enhancement Program

The North Carolina Ecosystem Enhancement Program's draft In-Lieu Fee Instrument states:

For ILF projects, transfer of mitigation liability to NCEEP occurs upon NCEEP's receipt of the appropriate payment from a Permittee, at which point NCEEP will assume the responsibility for all aspects of mitigation, including, but not limited to, the identification and selection of sites, property rights acquisition, mitigation plan design and development, construction, monitoring, preservation, and long-term management and maintenance of the required mitigation. In satisfaction of the compensatory mitigation requirements, NCEEP shall provide compensatory mitigation of the type and in the amount and Hydrologic Unit Code (HUC) specified in the Section 404, 401

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71 Ibid., Preamble p. 19638.

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72 Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

and/or [Coastal Area Management Act (CAMA)] permit.<sup>73</sup>

## Sample language

(Program Sponsor) assumes all legal responsibility for satisfying the mitigation requirements of the Corps/state permit for which fees have been accepted (i.e., the implementation, performance, and long-term management of the compensatory mitigation project(s) approved under this agreement and subsequent mitigation plans). The transfer of liability is established by: 1) the approval of this in-lieu fee instrument; 2) receipt by the district engineer of a credit sale form/letter/certificate that is signed by the (Program Sponsor) and the permittee and dated (see Section (X, “Reporting protocols”); and 3) the transfer of fees from the permittee to (Program Sponsor).

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73 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

## 4. Default and Closure Provisions

- The draft instrument must include: “Default and closure provisions;” (§332.8(d)(6)(ii)(D))

### Background and definitions

The section of the instrument regarding default and closure provisions is first included in the draft instrument.<sup>74</sup> As a result, the program sponsor will have the opportunity to consider feedback from the IRT before finalizing the default and closure section of the instrument.

Many of the pre-2008 agreements outlined the obligations of the sponsor in the event of program termination. Few, however, included specific provisions for default and closure. The 2008 rule requires the program sponsor to include in the draft instrument “Default and closure provisions;”<sup>75</sup> however, the terms “default” and “closure” are not defined.

Default and closure provisions may apply to specific in-lieu fee projects or overall program operations. Presumably default refers to instances wherein the sponsor fails to: “provide the required compensatory mitigation”<sup>76</sup> as demonstrated by meeting the performance standards set forth in the project-specific mitigation plan;<sup>77</sup> submit monitoring reports in a timely manner;<sup>78</sup> establish and maintain

an annual report ledger;<sup>79</sup> report approved credit transactions;<sup>80</sup> submit an annual ledger report<sup>81</sup> and individual ledgers for each project<sup>82</sup> in accordance with the provisions in the “accounting procedures” section;<sup>83</sup> submit an annual financial assurances and long-term management funding report;<sup>84</sup> complete land acquisition and initial physical and biological improvements by the third full growing season after the first advance credit in that service area is secured by a permittee,<sup>85</sup> and otherwise comply with the terms of the instrument (in other words, fails to comply with the program instrument and/or mitigation project plan).<sup>86</sup>

In such instances, the Corps is required to “take appropriate action to achieve compliance with the terms of the instrument.”<sup>87</sup> Examples of such appropriate actions include directing the sponsor to pursue adaptive management measures, decreasing the number of available credits, suspending credit sales, or directing the sponsor to use in-lieu fee program funds to provide alternative

74 Compensatory Mitigation Rule (2008), §332.8(d)(6)(ii)(C).

75 *Ibid.*, §332.8(d)(6)(ii)(D).

76 *Ibid.*, Preamble p. 19638.

77 *Ibid.*, §332.8(o)(10).

78 *Ibid.*, §332.6(c)(2).

79 *Ibid.*, §332.6(p)(2).

80 *Ibid.*, §332.6(p)(1).

81 *Ibid.*, §332.8(q)(1).

82 *Ibid.*, §332.8(p)(1).

83 *Ibid.*, §332.6(q)(2).

84 *Ibid.*, §332.6(q)(3).

85 *Ibid.*, §332.8(n)(4).

86 *Ibid.*, §332.8(o)(10).

87 *Ibid.*, Preamble p. 19638.

compensatory mitigation.<sup>88</sup> Additional appropriate actions include utilizing financial assurances, terminating the agreement, using in-lieu fee program account funds to secure credits from another source of third-party mitigation, or referring the non-compliance with the terms of the instrument to the Department of Justice.<sup>89</sup>

While an in-lieu program may default on a specific *project site* by failing to comply with its mitigation plan, an in-lieu fee *program* may seek closure for any number of reasons. A program may seek closure, for example, when all of the applicable success criteria have been achieved at all of its sites or all of the program's released credits have been debited.

Although the rule does not include any additional guidance as to the elements that are required of the default and closure provisions, the following should be considered:

- The circumstances under which the program may be deemed in default
- The circumstances under which the program will not be deemed in default, even if the program fails to meet its obligations (i.e., an “act of God” or “force majeure” provision)
- Process for program closure
  - o Notification by letter
  - o Number of days from written notification to termination
- Allocation of unused funds

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88 Ibid., Preamble p. 19638 and §§332.6(c)(2), 332.8(i)(2), and 332.8(o)(10).

89 Ibid.

- o Entity to whom the funds will be allocated
- o Discussion of how unused funds will be used (i.e., location and type of activity)
- Remaining mitigation obligations assumed by the in-lieu fee program (legal liability/responsibility to satisfy mitigation obligations)
- Obligations for long-term management

The rule clarifies the role that the Corps can play in calling upon financial assurances in the case of a default. The preamble states that the Corps “lacks statutory authority to accept directly, retain, and draw upon financial assurances, such as performance bonds, to ensure compliance with permit conditions.” Although the Corps can require sponsors to post and execute financial assurances, the agency cannot itself “accept directly, retain, or draw upon those funds in the event of a default.”<sup>90</sup>

## Examples of default and closure provisions

The 2003 agreement for the Calleguas Creek Watershed Aquatic Resource In-Lieu Fee Compensatory Mitigation Program included the following:

Either party to this agreement may terminate the agreement within 60 days of written notification to the other party. The CONSERVANCY may discontinue receiving monies upon written notification to the CORPS. However, without written approval from the

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90 Ibid., Preamble p. 19640.

CORPS, the CONSERVANCY shall not be relieved of its obligations under this agreement to complete and maintain compensatory mitigation sites at which restoration, enhancement, and/or creation has been initiated or for which some monies have already been expended. If the CONSERVANCY or the CORPS cancel the agreement, any unused In-lieu Fee Compensatory Mitigation Program fund monies received, but not obligated or expended, shall be returned to the CORPS or other entity approved in writing by the CORPS, and used for implementation of aquatic resource restoration, enhancement, and/or creation in the Calleguas Creek watershed.<sup>91</sup>

**Post-rule agreements, however, have included far more explicit language about default and closure.**

**North Carolina Ecosystem Enhancement Program**

**The draft instrument for North Carolina’s Ecosystem Enhancement Program states:**

***Default and Closure Provisions***

Upon 30 days written notice to [North Carolina Department of Environment and Natural Resources (NCDENR)], USACE may request closure of NCEEP’s ILF programs. In the event that the ILF operations of NCEEP are closed, NCDENR is responsible for fulfilling any remaining permit obligations held by NCEEP including the successful

completion of ongoing mitigation projects. Funds remaining in NCEEP mitigation accounts after these obligations are satisfied should continue to be used for restoration, enhancement, and/or preservation of aquatic resources.<sup>92</sup>

**The draft instrument for North Carolina’s Ecosystem Enhancement Program, also provides an example of a “force majeure” provision:**

Any delay or failure of NCEEP to comply with the terms of this agreement shall not constitute a default hereunder if and to the extent that such delay or failure is primarily caused by any act, event or conditions beyond NCEEP’s reasonable control and significantly adversely affects its ability to perform its obligations hereunder including: (i) acts of God, lightning, earthquake, fire, landslide, or interference by third parties; (ii) condemnation or other taking by any governmental body; (iii) change in applicable law, regulation, rule, ordinance or permit condition, or the interpretation or enforcement thereof; (iv) any order, judgment, action or determination of any federal, state or local court, administrative agency or government body; or (v) the suspension or interruption of any permit, license, consent, authorization or approval. If the performance of NCEEP is affected by any such event, NCEEP shall give written notice thereof to the DE and IRT as soon as is reasonably practicable. If such event

91 California Coastal Conservancy, Calleguas Creek Watershed Aquatic Resource In-Lieu Fee Compensatory Mitigation Program, California (2003).

92 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

occurs before the final availability of all credits for a project, NCEEP shall take remedial action to restore the property to its condition prior to such event, in a manner sufficient to provide adequate mitigation to cover credits that were used for permit requirements prior to such delay or failure to compensate for impacts to waters authorized by Department of the Army permits. Such remedial action shall be taken by NCEEP only to the extent necessary and appropriate, as determined by the DE in consultation with the IRT. If such an event prevents a mitigation project from meeting the time requirements established in this agreement, the DE may, in its discretion, modify the time-line requirements.<sup>93</sup>

**Oregon Statewide Fee-in-Lieu Instrument**  
**The 2008 Oregon Statewide Fee-in-Lieu Instrument included the following default and closure language:**

***Default***

Should the District Engineer determine that DSL is in material default of any provision of this Instrument or an approved mitigation plan, the District Engineer may take appropriate action. Such actions may include, but are not limited to, suspending credit sales, adaptive management, decreasing available credits, directing funds to alternate locations, taking enforcement actions, or terminating the Instrument.

***FIL Project Closure***

At the end of the monitoring period and approval of the long-term

stewardship contract, or upon sale of the last credit, whichever is later, the Corps shall issue a written “project closure certification” to DSL. DSL may request that part of or an entire FIL project be closed early, and that the associated credits anticipated be forfeited, if it is determined that the performance standards are unattainable or it is otherwise in DSL’s interest. The Corps shall decide whether to grant such requests. In the case that credits were debited or transferred prior to the early closure, DSL shall be responsible for fulfilling all related obligations consistent with this Instrument.<sup>94</sup>

**The 2008 Oregon Statewide Fee-in-Lieu Instrument’s force majeure provision is as follows:**

DSL or a grantee will not be responsible for FIL project failure that is attributed to natural catastrophes such as flood, drought, disease, or regional pest infestation, that the IRT Chair, determines is beyond the reasonable control of DSL or a grantee to prevent or mitigate.<sup>95</sup>

**Sample language**

**If the Corps determines that (Program Sponsor) has failed to provide the required compensatory mitigation in a timely manner (i.e., (Program Sponsor) has failed to meet performance-based milestones set forth in the**

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94 Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

95 Ibid.

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93 Ibid.



project-specific mitigation plan, meet ecological performance standards, submit monitoring reports in a timely manner, establish and maintain an annual ledger report and individual ledgers for each project in accordance with the provisions in Section (X, “Accounting Procedures”), submit an annual financial assurances and long-term management funding report, report approved credit transactions, complete land acquisition and initial physical and biological improvements by the third full growing season after the first advance credit in that service area is secured by a permittee, and/or otherwise comply with the terms of the instrument), the district engineer must take appropriate action to achieve compliance with the terms of the instrument and all approved mitigation plans. Such actions may include suspending credit sales, decreasing available credits, requiring adaptive management measures, utilizing financial assurances or contingency funds, terminating the agreement, using the financial assurances or contingency funds to provide alternative compensation, directing the use of in-lieu fee program account funds to provide alternative mitigation (e.g., securing credits from another third-party mitigation provider), or referring the non-compliance with the terms of the instrument to the Department of Justice.

Any delay or failure of (Program Sponsor) to comply with the terms of this agreement shall not constitute a default if and to the extent that such delay or failure is primarily caused by any force majeure or other conditions beyond (Program Sponsor)’s reasonable control and

significantly adversely affects its ability to perform its obligations hereunder, such as flood, drought, lightning, earthquake, fire, landslide, condemnation or other taking by any governmental body. (Program Sponsor) shall give written notice to the district engineer and IRT if the performance of any of its in-lieu fee projects is affected by any such event as soon as is reasonably practicable.

Either party to this agreement may terminate the agreement within 60 days of written notification to the other party. In the event that the (ILF Program) operated by (Program Sponsor) is terminated, (Program Sponsor) is responsible for fulfilling any remaining project obligations including the successful completion of ongoing mitigation projects, relevant maintenance, monitoring, reporting, and long-term management requirements. (Program Sponsor) shall remain responsible for fulfilling these obligations until such time as the long-term financing obligations have been met and the long-term ownership of all mitigation lands has been transferred to the party responsible for ownership and all long-term management of the project(s).

Funds remaining in the (ILF Program) accounts after these obligations are satisfied must continue to be used for the restoration, establishment, enhancement, and/or preservation of aquatic resources. The Corps shall direct (ILF Program) to use these funds to secure credits from another source of third-party mitigation, such as another in-lieu fee program, mitigation bank, or another entity such as a governmental or non-profit natural

resource management entity willing to undertake the compensation activities. The funds should be used, to the maximum extent practicable, to provide compensation for the amount and type of aquatic resource for which the fees were collected. The Corps itself cannot accept directly, retain, or draw upon those funds in the event of a default.

## 5. Reporting Protocols

- The draft instrument must include: “Reporting protocols;” (§332.8(d)(6)(ii)(E))

### Background and definitions

The section of the instrument regarding reporting protocols must first be included in the draft instrument.<sup>96</sup> As a result, the program sponsor will have the opportunity to consider feedback from the IRT before finalizing the reporting protocol section of the instrument.

The 2008 rule requires the draft instrument to include “Reporting protocols.”<sup>97</sup> The in-lieu fee sponsor has four reporting requirements:

1. Monitoring reports, on a schedule and for a period as defined by project-specific mitigation plan(s);<sup>98</sup>
2. Credit transaction notification;<sup>99</sup>
3. An annual program report summarizing activity from the program account (financial and credit accounting);<sup>100</sup> and
4. An annual financial assurances and long-term management funding report.<sup>101</sup>

### Monitoring reports

Monitoring is required of all compensatory mitigation projects explicitly to “determine if the project is meeting its performance standards” and “if measures are necessary to ensure that the compensatory mitigation project is accomplishing its objectives.”<sup>102</sup> If the program sponsor fails to submit reports in “a timely manner,” the Corps may take compliance action.<sup>103</sup>

Monitoring reports must be submitted to the district engineer. The details of the monitoring requirements are not outlined in the in-lieu fee instrument, but rather are developed for each individual compensation project and included in the project-specific mitigation plans (which themselves go through public review and IRT comment). In 2008, the Corps issued a Regulatory Guidance Letter (RGL-08-03) that recommends minimum monitoring requirements for compensatory mitigation projects.<sup>104</sup> The rule, however, states that the mitigation plan(s) must spell out “the parameters to be monitored, the length of the monitoring period, the party responsible for

96 Compensatory Mitigation Rule (2008), §332.8(d)(6)(ii)(E).

97 Ibid.

98 Ibid., §§332.6 et seq. and 332.8(q)(2).

99 Ibid., §332.8(p)(1).

100 Ibid., §§332.8(i)(3) and 332.8(q)(1).

101 Ibid., §332.8(3).

102 Ibid., §332.6(a)(1).

103 Ibid., §332.6(c)(2).

104 U.S. Army Corps of Engineers. October 2008. Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Restoration, Establishment, and/or Enhancement of Aquatic Resources. <http://www.usace.army.mil/cecw/pages/rglsindx.aspx>. (Last visited December 9, 2009.)

conducting the monitoring, the frequency for submitting monitoring reports to the district engineer, and the party responsible for submitting those monitoring reports to the district engineer.”<sup>105</sup> The level of detail and substance of the reports “must be commensurate with the scale and scope of the compensatory mitigation project type.”<sup>106</sup>

The Corps is required to provide monitoring reports to “interested federal, tribal, state, and local resource agencies, and the public, upon request.”<sup>107</sup>

### Credit transaction notification

The legally enforceable transfer of responsibility between the permittee and the in-lieu fee program sponsor is established by the approved in-lieu fee instrument and the receipt by the district engineer of documentation that confirms that the sponsor has accepted the responsibility for providing the required compensatory mitigation (see Section 2, “Accounting Procedures,” and Section 3, “Provisions Stating Legal Responsibility to Provide Compensatory Mitigation”).<sup>108</sup> Each time the program sponsor accepts fees from a permittee in exchange for advance or released credits, the sponsor must notify the district engineer of the credit transaction. This documentation “may consist of a letter or form signed by the sponsor, with the permit number and a statement indicating the number and

resource type of credits that have been secured from the sponsor.”<sup>109</sup> See Appendix B for a sample letter developed by the Oregon Department of State Lands that is used by that program to document that credits have been secured from the sponsor and that legal responsibility has transferred from the permittee to the sponsor.

### Annual program report

The in-lieu fee sponsor must submit an annual report (i.e., annual ledger report) to the district engineer and the IRT.<sup>110</sup> The report must be made available to the public upon request.<sup>111</sup> The rule lists the elements that must be included in the annual program report.<sup>112</sup>

Program account (financial) reporting:

1. All income received and interest earned by the program account for the program and by service area
2. A list of all permits for which in-lieu fee program funds were accepted by service area, including

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<sup>109</sup> *Ibid.*, §332.3(l)(3).

<sup>110</sup> There is some inconsistency in the rule with regard to submitting the annual report. Section 332.8(i)(3) says it must be submitted to the district engineer and the IRT, while §332.8(q)(1) states it must be submitted to the district engineer who will then distribute it to the IRT. Since §332.8(i)(3) related explicitly to in-lieu fee programs and is more comprehensive than §332.8(q), it is likely that it is the intent of the agencies that the program sponsor submit the annual report to both the district engineer and the IRT.

<sup>111</sup> Compensatory Mitigation Rule (2008), §332.8(q)(1).

<sup>112</sup> *Ibid.*, §§332.8(i)(3) et seq. and §332.8(q)(1).

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<sup>105</sup> Compensatory Mitigation Rule (2008), §§332.6(a)(1) and 332.6(b).

<sup>106</sup> *Ibid.*, §332.6(a)(1).

<sup>107</sup> *Ibid.*, §332.6(c)(3).

<sup>108</sup> *Ibid.*, Preamble p. 19638.

- o The Corps permit number (or the state permit number)
  - o The service area in which the authorized impacts are located
  - o The amount of authorized impacts
  - o The amount of required compensatory mitigation
  - o The amount paid to the in-lieu fee program
  - o The date the funds were received from the permittee
3. A description of in-lieu fee program expenditures/disbursements from the account (i.e., the costs of land acquisition, planning, construction, monitoring, maintenance, contingencies, adaptive management, and administration) for the program and by service area.

Ledger (credit) reporting:

1. The balance of advance credits and released credits at the end of the report period for the program and by service area
2. The permitted impacts for each resource type
3. All additions and subtractions of credits
4. Other changes in credit availability (e.g., additional credits released, credit sales suspended)

Additional information:

1. Any other information required by the district engineer

## Financial assurances and long-term management funding report

The in-lieu fee sponsor must submit an annual report on financial assurances and long-term management.<sup>113</sup> This report must be provided to the Corps and IRT so that they are able to ensure that financial assurances are maintained for each project. Similar to the annual report, this report should be submitted to the district engineer and the IRT and should be made available to the public upon request.

Financial assurances are funds that are set aside or may be drawn upon to use in the case of project underperformance or failure. The rule requires financial assurances to be “sufficient” enough “to ensure a high level of confidence that the compensatory mitigation project will be successful completed, in accordance with applicable performance standards.”<sup>114</sup> They may be in the form of “performance bonds, escrow accounts, casualty insurance, letters of credit, legislative appropriations for government sponsored projects, or other appropriate instruments...”<sup>115</sup> Financial assurances may be phased out when the Corps determines that the specific project has met its performance standards.<sup>116</sup> The financial assurances need not be worked out and included in the prospectus or program instrument. This information must, how-

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113 Ibid., §332.8(q)(3).

114 Ibid., §332.3(n)(1).

115 Ibid., §332.3(n)(2).

116 Ibid., §332.3(n)(4).

ever, be included in the project-specific mitigation plan.<sup>117</sup>

The program sponsor and the bonding or other financial assurance entity should be required to give the Corps at least 120 days advance notice if financial assurances will be terminated or revoked. The rule suggests that in-lieu fee program sponsors may satisfy this requirement through a contractual requirement for the assurance provider to notify the Corps at least 120 days before the assurance is revoked or terminated.<sup>118</sup> Any changes to the financial assurances should be noted in the annual report.

Among the “other appropriate instruments” that may be considered, are contingency funds. As discussed in Section 8, “Method for Determining Project-Specific Credits and Fees & Draft Fee Schedule,” the costs per unit of credit for in-lieu fee programs should factor in contingency costs that are “appropriate to the stage of project planning, including uncertainties in construction and real estate expenses.”<sup>119</sup> In some cases, the Corps may allow a program sponsor to rely upon these accumulated contingency funds to address the need for remedial action or adaptive management.

Long-term management funding refers to funds or accounts that are set aside to ensure that monies will be available to support the annual long-term management needs of the compensatory mitigation project(s). Appropriate mechanisms

include “non-wasting endowments, trusts, contractual arrangements with future responsible parties, and other appropriate financial instruments.”<sup>120</sup> Program sponsors must include information on the “*proposed... long-term management strategy*” in the program prospectus.<sup>121</sup> Specific detailed information about the long-term financing for in-lieu fee programs must be addressed in either the instrument or approved mitigation plan. In either case, the sponsor must explicitly indicate the “long-term financing mechanisms and the party responsible for the long-term management.”<sup>122</sup> Section 10, “Transfer of Long-Term Management Responsibilities,” describes how long-term management responsibilities and funding may be transferred to another entity and Section 11, “Financial Arrangements for Long-Term Management,” describes how this information might be included in the instrument.<sup>123</sup>

The financial assurances and long-term management funding report must include:

- Beginning and ending balances of the accounts providing funds for financial assurances and long-term management
- Deposits into and any withdrawals from the accounts providing funds for financial assurance and long-term management
- Information on the amount of required financial assurances and the

<sup>117</sup>Ibid., §332.4(c)(13).

<sup>118</sup>Ibid., §332.3(n)(5).

<sup>119</sup>Ibid., Preamble p. 19660 and §332.8(o)(5)(ii).

<sup>120</sup>Ibid., §332.7(d)(3).

<sup>121</sup>Ibid., §332.8(d)(2)(v). Emphasis added.

<sup>122</sup>Ibid., §332.4(c)(11)

<sup>123</sup>Ibid., §332.8(u)(3).

status of those assurances, including their potential expiration.

## Examples of reporting protocols

### Oregon Statewide Fee-in-Lieu Instrument

The compensation planning framework component of Oregon’s 2008 Statewide Fee-in-Lieu Instrument includes the following language:

DSL shall submit an annual report by December 1 to the District Engineer and IRT containing the following:

#### *FIL Program Report*

The report shall describe all income, disbursements, and interest earned with respect to the FIL Program Account for the state’s previous fiscal year (July 1 to June 30).

#### *FIL Project Reports*

The report shall contain the following information for each FIL project that has not been approved for closure:

- a. A report that includes the Corps, DSL, or other agency permit number, the amount of authorized impacts, the amount of required compensatory mitigation, the amount paid to the FIL Program, and the date the funds were received from the permittee;
- b. An accounting of expenditures for the FIL project;
- c. The balance of advance credits and released credits at the end of the report period for each resource type, and any changes in credit availability (including additional credits released).
- d. The annual monitoring report (if the monitoring period has not ended).

- e. A description of any remedial action items implemented during the prior year.
- f. An explanation if performance standards are not being met and any adaptive management strategies undertaken in the last year, or planned for the upcoming year.<sup>124</sup>

### North Carolina Ecosystem Enhancement Program

The draft instrument for North Carolina’s Ecosystem Enhancement Program, includes the following language:

#### *Program Reporting Protocols*

All approved credit transactions shall be reported to the DE by providing copies of the transfer of mitigation liability documentation for each issued permit, which will be included in the administrative record for the instrument. NCEEP shall be subject to the following reporting protocols, detailing activity from July 1 to June 30 of each year:

#### *Annual Report*

NCEEP will provide a comprehensive annual report each year on October 1st to the DE, [North Carolina Department of Transportation (NCDOT)] and members of the IRT. This report will include at a minimum the following elements:

- a. All income received, disbursements, and interest earned by the program account.
- b. A list of all permits for which ILF program funds were accepted, which must including the following information:

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<sup>124</sup> Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

- i. USACE ORM ID Number [permit number from the Corps' permit tracking program]
  - ii. [North Carolina Division of Water Quality] Permit Number
  - iii. [North Carolina Division of Coastal Management] Permit Number
  - iv. 8-digit HUC in which the impacts occurred
  - v. Amount of authorized impacts
  - vi. The required amount of compensatory mitigation
  - vii. The amount paid to the ILF program
  - viii. The date the funds were received from the Permittee
- c. A description of the expenditure of funds from the program account, which must include the following information:
- i. Land Costs
  - ii. Planning Costs, to include watershed planning
  - iii. Construction costs
  - iv. Monitoring Costs
  - v. Maintenance costs
  - vi. Adaptive Management and Contingencies
  - vii. Administrative costs
- d. For Advanced Credits, NCEEP shall report the balance of Advance Credits and Released credits by each river basin.

*Debit Ledger*

NCEEP shall also provide a Debit Ledger annually to the DE that contains the following:

- a. List of approved mitigation sites with amount and type of stream and

- wetland resource, 8-digit CU and stage of implementation
- b. Beginning and ending available credit amount with permitted impact(s) for each resource type
- c. All additions and subtractions of credits, and any other changes in credit availability
- d. A Compliance Status Report that provides the following:
  - i. 8-digit HUC
  - ii. Deficit in the required mitigation
  - iii. USACE, NCDWQ, and NCDCM permit numbers
  - iv. Proposed actions NCEEP intends to take to correct any non-compliance<sup>125</sup>

**Sample language**

**(Program Sponsor) must report to the district engineer and the IRT the following information:**

- 1. Monitoring reports, on a schedule and for a period as defined by project-specific mitigation plan(s)**
- 2. Credit transaction notifications**
- 3. An annual program report summarizing activity from the program account (financial and credit accounting) as detailed below**
- 4. An annual financial assurances and long-term management funding report as detailed below**

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<sup>125</sup>North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.



*Monitoring reports*

Monitoring is required of all compensatory mitigation projects to determine if the project is meeting its performance standards and if additional measures are necessary to ensure that the compensatory mitigation project is accomplishing its objectives. If (Program Sponsor) fails to submit reports within (amount of time that is reasonable, e.g., 30 days) of the deadlines outlined in the mitigation plan(s), the Corps may take appropriate compliance action (see Section (X, “Default and closure”)).

Project-specific mitigation plans will detail the parameters to be monitored, the length of the monitoring period, the dates that the reports must be submitted (e.g., first of each month), the party responsible for conducting the monitoring, the frequency for submitting monitoring reports to the district engineer, and the party responsible for submitting those monitoring reports to the district engineer and the IRT. The level of detail and substance of the reports must be commensurate with the scale and scope of the compensatory mitigation project.

The Corps is required to provide monitoring reports to interested federal, tribal, state, and local resource agencies, and the public, upon request.

*Credit transaction notification*

Section (X, “Provisions stating legal liability”) establishes the terms by which the legal responsibility for compensation requirements is transferred from the permittee to (Program Sponsor). These terms require (Program Sponsor) to

submit a credit sale form/letter/certificate to the Corps. The document must be signed by the (Program Sponsor) and the permittee and dated. The credit transaction form/letter/certificate must include the permit number(s) for which (Program Sponsor) is accepting fees, the number of credits being purchased, and resource type(s) (e.g., Cowardin class) of credits being purchased. See (Appendix B) for a sample credit transaction form/letter/certificate.

(Program Sponsor) must submit the signed and dated credit transaction form/letter/certificate within 10 days of receiving the fees from the permittee.

A copy of each credit transaction form/letter/certificate will be retained in both the Corps’ and (Program Sponsor’s) administrative and accounting records for the (ILF Program).

*Annual program report*

(Program Sponsor) must submit an annual report (annual ledger report) to the district engineer and the IRT. The report must be made available to the public upon request. The annual program report must be submitted no later than (Day, Month, e.g., November 1st), or the following business day if that date falls on a federal/state holiday or weekend. The annual report must include the following information:

Program account (financial) reporting:

- All income received and interest earned by the program account for the program and by service area
- A list of all permits for which in-lieu fee program funds were accepted by service area, including
  - o The Corps permit number (and/or the state permit number)
  - o The service area in which the authorized impacts are located
  - o The amount of authorized impacts
  - o The amount of required compensatory mitigation
  - o The amount paid to the in-lieu fee program
  - o The date the funds were received from the permittee
- A description of in-lieu fee program expenditures/disbursements from the account (i.e., the costs of land acquisition, planning, construction, monitoring, maintenance, contingencies, adaptive management, and administration) for the program and by service area

Ledger (credit) reporting:

- The balance of advance credits and released credits at the end of the report period for the program and by service area
- The permitted impacts for each resource type
- All additions and subtractions of credits
- Other changes in credit availability (e.g., additional credits released, credit sales suspended)

*Financial assurances and long-term management funding report*

(Program Sponsor) must submit an annual report on financial assurances and long-term management to the district engineer and the IRT.

(Program Sponsor) is required to give the Corps at least (XX days; to be determined by the sponsor in consultation with the Corps and IRT) advance notice if required financial assurances will be terminated or revoked. In addition, the financial assurance instrument must be written in such a way that it is the obligation of the bonding company or financial institution to provide the Corps notice. Inclusion of a summary of any changes to the financial assurances in the reporting year does not alter this separate obligation.

The financial assurances and long-term management funding report must include:

- Beginning and ending balances of the individual project accounts providing funds for financial assurance and long-term management
- Deposits into and any withdrawals from the individual project accounts providing funds for financial assurance and long-term management
- Information on the amount of required financial assurances and the status of those assurances, including their potential expiration for each individual project

## 6. Compensation Planning Framework

- “For a proposed in-lieu fee program, the prospectus must include...The compensation planning framework...” (§332.8(d)(2)(viii))
- “For an in-lieu fee program, a complete draft instrument must include...The compensation planning framework” (§332.8(d)(6)(iv)(A))

### Background and definitions

The section of the instrument regarding the compensation planning framework must first be included in the prospectus<sup>126</sup> and then again in the draft instrument.<sup>127</sup> As a result, the program sponsor has the opportunity to consider public feedback and comments, as well as two rounds of review from the IRT, before finalizing the compensation planning framework in the final instrument.

The compensation planning framework is a detailed and extensive section of the prospectus and instrument that is “used to select, secure, and implement aquatic resource restoration, establishment, enhancement, and/or preservation activities.”<sup>128</sup> This element of the in-lieu fee program instrument was added to the 2008 rule to improve the practice’s “accountability and performance.”<sup>129</sup> The framework is “essentially a watershed plan designed to support resource restoration...”<sup>130</sup>

All of the specific in-lieu fee projects selected by the program sponsor must

be supported by and consistent with the approved framework. Modifications to the framework must be approved by the district engineer, after consultation with the IRT.<sup>131</sup>

The compensation planning framework must include the following **ten elements**:

1. The geographic service area(s), including a watershed based rationale for the delineation of each service area
2. A description of the threats to aquatic resources in the service area(s), including how the in-lieu fee program will help offset impacts resulting from those threats
3. An analysis of historic aquatic resource loss in the service area(s);
4. An analysis of current aquatic resource conditions in the service area(s), supported by field documentation
5. A statement of aquatic resource goals and objectives for each service area, including a description of the general amounts, types and locations of aquatic resources the program will seek to provide
6. A prioritization strategy for selecting and implementing compensatory mitigation activities

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126 Compensatory Mitigation Rule (2008), §332.8(d)(2)(viii).

127 Ibid., §332.8(d)(6)(iv)(A).

128 Ibid., §332.8(c)(1).

129 Ibid., Preamble p. 19600.

130 Ibid.

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131 Ibid., §332.8(c)(1).

7. An explanation of how any preservation objectives identified above satisfy the criteria for use of preservation
8. A description of any public and private stakeholder involvement in plan development and implementation, including coordination with federal, state, tribal and local aquatic resource management and regulatory authorities
9. A description of the long term protection and management strategies for activities conducted by the in-lieu fee program sponsor
10. A strategy for periodic evaluation and reporting on the progress of the program in achieving the goals and objectives above, including a process for revising the planning framework as necessary

Finally, the district engineer may request additional information to be included to ensure “effective compensation planning.”<sup>132</sup>

## Examples of compensation planning framework elements

Several pre-2008 in-lieu fee programs served as models for development of the compensation planning framework. Most notably was the North Carolina Ecosystem Enhancement Program (EEP), which developed a watershed planning structure to guide its compensatory mitigation program. EEP used data from the North Carolina Division of Water Quality to develop River Basin Restoration Priority Plans that targeted specific areas

<sup>132</sup> *ibid.*, §332.8(c)(2).

within each of the state’s seventeen river basins for restoration investments. In 2001, the program began developing detailed Local Watershed Plans to identify further projects for the North Carolina Department of Transportation.<sup>133</sup>

Because each compensation planning framework will be unique to the program for which it was developed, model language will not be offered here. Instead, examples and resources are provided for each of the ten required elements. The level of detail necessary for the compensation planning framework is left to the discretion of the district engineer and will “take into account the characteristics of the service area(s) and the scope of the program.”<sup>134</sup> Many of the frameworks are likely to be presented as qualitative summaries by watershed or basin.

**Element 1:** The geographic service area(s), including a watershed based rationale for the delineation of each service area

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Since the service area is a required element of the prospectus, draft instrument, and final instrument, this section of the compensation planning framework can refer to that section of prospectus or instrument. All of the resources and examples in Section 1, “Service

<sup>133</sup> Additional information about the program’s watershed planning process can be found at: <http://www.nceep.net/pages/lwplanning.htm>.

<sup>134</sup> Compensatory Mitigation Rule (2008), §332.8(c)(3).

Area,” pertain to this section of the compensation planning framework.

**Element 2:** A description of the threats to aquatic resources in the service area(s), including how the in-lieu fee program will help offset impacts resulting from those threats

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## Background

This section of the compensation planning framework is likely to be highly variable from program to program. At a minimum, programs should consider including information on development trends (information on population trends, transportation and infrastructure planning, and energy development), flood risk, water quality, and at-risk species. Including this information will facilitate the discussion of how the program can best offset impacts. Below are examples from several approved or draft compensation planning framework documents, as well as some resources on where to locate these data.

## Examples

### Living River Restoration Trust

The Watershed Action Plan that serves as the Comprehensive Planning Framework for the Living River Restoration Trust, an approved in-lieu fee program in Virginia, identifies six “problem areas, or ‘stressors’” in the watershed that pose the highest risks to the Elizabeth River. These include: toxics in sediments; a lack of integrated public policy and regulation; the loss of wetlands and buffers; excess nutrients and low dissolved

oxygen; unsustainable development; lack of knowledge and public awareness; and harmful bacteria.<sup>135</sup>

### North Carolina Ecosystem Enhancement Program

The North Carolina EEP’s draft compensation planning framework used several additional sources of data to analyze threats to aquatic resources. These included spatial datasets and reports, such as existing water quality data from the state division of water quality. These state agencies maintain ambient water quality monitoring data, studies on Total Maximum Daily Loads, data on entities that have permits to discharge into surface waters, as well as additional spatial and other data. Additional data on threats are available through each state’s wildlife agency (i.e., the state Wildlife Action Plan) and the state Natural Heritage Program. EEP also relied upon landcover and aerial photography.<sup>136</sup>

### Oregon Statewide Fee-in-Lieu Instrument

The compensation planning framework for the Oregon program identifies priority watershed in the state based on: past mitigation needs in the watershed based on historical permitted impacts; future need for mitigation in the watershed based on projected growth and

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135 Elizabeth River Project and Virginia Department of Environmental Quality. “A Watershed Action Plan: The River of the Future.” Revised Third Edition ~ Executive Summary. <http://www.elizabethriver.org/Publications/ERP%20Pubs/Combined-WAP-Exec-sum-final-alt.pdf>. (Last visited December 22, 2009.)

136 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

development trends; lack of private mitigation banks to meet the demand for credits in the service area; and availability of funds in the third-field hydrologic unit watersheds of the state.<sup>137</sup>

The framework includes profiles for each of the priority watersheds. Each of the profiles addresses threat to aquatic resources. For example, in the Necanicum watershed, a medium priority watershed, the identified threats include: “continued growth and demands on water supply, increased nutrient inputs, and potential harvest of forests coming to harvestable age after the Tillamook Fires in 1930s and 1940s and subsequent reforestation efforts in the 1950s and 1960s.”<sup>138</sup>

#### Southeast Alaska Land Trust

The Southeast Alaska Land Trust draft compensation planning framework<sup>139</sup> discusses two levels of threats to aquatic resources – regional threats and larger scale threats. The regional threats are fairly generalized and the framework does not provide citations to give the reader a sense of how these threats were identified. For example, it states:

From a regional perspective, aquatic resources face potential threats in the future to the extent that resource development (timber harvest, mining, energy, and small-scale activities), intra-regional highway and power transmission, and community expansion

occur. In general, future community and resource developments in Southeast Alaska -- and the associated, unavoidable impacts to aquatic resources -- are likely to be similar to those that have occurred in the past. We do not anticipate unfamiliar development activities will occur that would have unique or unusual impacts on aquatic resources not already experienced in Southeast Alaska.

The framework also details potential threats from larger-scale development or projects. These known or likely impacts are summarized by activity type. Information on urbanization draws from census population data and economic trends data available through the Alaska Department of Labor and Workforce Development. Data on transportation trends was available through the Alaska Department of Transportation and Public Facilities, specifically regional transportation plans and the statewide Transportation Improvement Program.

Threats from energy and hydropower projects, as well as and the development of regional power transmission lines, were identified through reports available from the Alaska Energy Authority, such as the state energy plan and a Renewable Energy Atlas. The sponsor also analyzed the potential projects identified by the Alaska Energy Authority for funding through the legislatively enacted Alaska Renewable Energy Fund. Finally, threats from timber harvest were deduced from reports available through the U.S. Forest Service, such as the Tongass Land and Resource Management Plan and Final

137 Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

138 Ibid., Exhibit A, p. XI-viii.

139 Southeast Alaska Land Trust. 2008. Draft Compensation Planning Framework.

Environmental Impact Statement for the Tongass Land Management Plan.

## Resources

Information from some of the sources discussed above is readily available through a variety of federal, state, and local resources. Information on development trends can be gathered through sources collected to track population trends, plan for transportation and infrastructure, and plan for energy development. Information on flood risk is available through federal and state sources, as well as locally (e.g., Federal Emergency Management Agency (FEMA) floodplain maps, coastal zone management plans, etc.). Information on water quality is largely available through state water quality agencies. And information on at-risk species can be gathered from numerous, existing state and federal plans and from conservation non-profits and government agencies. Sources of this information and more specifics are all available in Appendix A and can be found under the sections on at-risk species/habitat, development trends (population trends, transportation and infrastructure, energy development), flood risk, and water quality.

**Element 3:** An analysis of historic aquatic resource loss in the service area(s)

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## Background

The compensation planning framework must include an analysis of historic aquatic resource loss in the area to help

guide decisions about the types and location of aquatic resources that should be replaced in the watersheds under consideration. For example, this analysis might reveal that a specific watershed currently dominated by forested wetlands was once largely characterized by the presence of emergent wetlands. Because of past land use changes, few emergent wetlands remain so future impacts are anticipated to affect forested wetlands. This analysis might lead to the replacement of forested wetland with emergent wetlands, in an effort to restore the historic complement of wetland types to the watershed. Below are examples from two approved or draft compensation planning framework documents, as well as some resources on where to locate these data.

## Examples

### Living River Restoration Trust

The Living River Restoration Trust's Watershed Action Plan lists seven priority actions for achieving improvements to the Elizabeth River Ecosystem. In many of the priority action chapters, the plan discusses historic conditions. For example, in the chapter "Action 2: Restore and conserve wetlands, shellfish beds and forested shores," the plan states:

The Elizabeth River watershed has lost 50 percent of its tidal wetlands since World War II. Other habitat loss is also severe. The Elizabeth has been deepened to an average of twice her natural depth for shipping and filled to two-thirds her natural width for development of the port cities. Harvest of the

once famous “Norfolk Oyster” has been banned since the 1920s.<sup>140</sup>

### North Carolina Ecosystem Enhancement Program

The North Carolina EEP’s draft compensation planning framework<sup>141</sup> examined trends in water quality data and land use to assess the aquatic resource loss within a watershed. The data to support this analysis were provided by the state water quality program and included ambient monitoring data, benthic and fishery data, habitat scores and special studies conducted by the agency.

EEP also compared land use data with historical datasets that were available through the local Soil and Water Conservation District, USDA Natural Resource Conservation Service and county government offices. Additional information was obtained from the state natural heritage program, wildlife agency (i.e., state wildlife action plan), and the state department of transportation. EEP used this information to “assess change in stressors to stream and wetland resources and help identify key problems and the associated functional loss of water quality, habitat and hydrology.” The results of this analysis were included in a *Preliminary Findings Report*, which summarizes watershed conditions, threats and historic aquatic resource loss.<sup>142</sup>

140 Elizabeth River Project and Virginia Department of Environmental Quality. “A Watershed Action Plan: The River of the Future.” Revised Third Edition ~ Executive Summary.

141 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

142 Ibid.

### Southeast Alaska Land Trust

The Southeast Alaska Land Trust draft compensation planning framework<sup>143</sup> relied upon data in the following categories and from the following sources to analyze historic aquatic resource loss:

- Urbanization – Data were culled from the scientific literature, as well as state §305(b) and §303(d) reports
- Timber harvest, and associated roads, log transfer, storage and processing facilities – Data were gathered from the EIS developed by the U.S. Forest Service for the federal forest in the region, state §305(b) and §303(d) reports, and essential fish habitat plans developed by NOAA National Marine Fisheries Service
- Transportation construction (roads, airports, commercial harbors, and ferry terminals) – Information was provided by the state department of transportation and the federal forest EIS
- Other coastal development (seafood processing, mining, hydropower, and tourism) – Data from the state §305(b) and §303(d) reports and essential fish habitat plans were used

### **Resources**

As discussed in Element 2 above, information on development trends (i.e., urbanization) can be gathered through sources collected to track population trends, plan for transportation and infrastructure, and plan for energy development. Information on habitat

143 Southeast Alaska Land Trust. 2008. Draft Compensation Planning Framework.



trends is often available through sources of information on at-risk species.

Several additional sources of information may prove helpful in analyzing historic aquatic resource losses in the potential service area, such as those available through federal agencies that track the status and trends in habitat and land use, such as the National Wetlands Inventory and a variety of data available through the USGS Land Cover Institute. Sources of this information and more specifics are available in Appendix A and can be found under the section on status and trends in habitat and land use.

**Element 4:** An analysis of current aquatic resource conditions in the service area(s), supported by field documentation

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## Background

This section of the compensation planning framework is likely to draw from many of the same sources of information on water quality as those in Element 2. Several examples follow.

## Examples

### Living River Restoration Trust

The Watershed Action Plan that serves as the Comprehensive Planning Framework for the Living River Restoration Trust, an approved in-lieu fee program in Virginia, lists seven priority actions for achieving improvements to the Elizabeth River Ecosystem. Many of the priority action plan chapters discuss current conditions. For example, in the chapter

“Action 4: Make fishing and swimming safe for humans by reducing harmful bacteria to acceptable levels,” the plan states:

Virginia advises against eating more than two meals per month of most fish, due to [polychlorinated biphenyl (PCB)] contamination, throughout the River basin, including the Elizabeth, and advises against any consumption of gizzard shad, carp, and large catfish. Pregnant or nursing women are at the highest risk. Meanwhile, elevated bacteria levels also make swimming inadvisable in most areas of the river. In general, bacteria enter waterways through contaminated stormwater drains, sewer overflows, sewage treatment plants, and animal waste. A panel of health experts, convened by Elizabeth River Project in 1995, also advised against near-shore swimming and wading due to [Polycyclic aromatic hydrocarbon (PAH)] contamination in the river.<sup>144</sup>

### North Carolina Ecosystem Enhancement Program

The North Carolina EEP’s draft compensation planning framework<sup>145</sup> relied on much of the same information discussed in Element 2. This included datasets on water quality data from the state water quality program, including ambient monitoring data, [Total Maximum Daily

<sup>144</sup> Elizabeth River Project and Virginia Department of Environmental Quality. “A Watershed Action Plan: The River of the Future.” Revised Third Edition ~ Executive Summary.

<sup>145</sup> North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

Load (TMDL)] studies, and [National Pollution Discharge Elimination System (NPDES)] discharge information. The program also referred to the state wildlife action plan and the state natural heritage program, landcover and aerial photography, and transportation information from the state's Transportation Improvement Project (TIP). Collection and review of these data were supported by "windshield assessments...to verify the accuracy of aerial photography and landcover datasets, better understand the composition of sub-watersheds within the local watershed planning area and look for threats to aquatic resources that may or may not be evident from spatial data."<sup>146</sup>

#### Southeast Alaska Land Trust

The Southeast Alaska Land Trust draft compensation planning framework<sup>147</sup> was:

based on a review of recent region-wide or local publications and online information sources (including NOAA Fisheries, Environmental Protection Agency, U.S. Forest Service, Alaska Department of Fish and Game, Juneau Watershed Partnership).

The section summarizes land cover data and the freshwater wetland types, functions, and services in the region (from the state wildlife agency), and discusses coastal resources (from the National Audubon Society's Important Bird Areas Program and North American Bird Conservation Initiative, and data from a

<sup>146</sup>Ibid., p. 21.

<sup>147</sup>Southeast Alaska Land Trust. 2008. Draft Compensation Planning Framework. p. 8.

ShoreZone,<sup>148</sup> a partnership that develops mapping products of the shoreline of Washington State and British Columbia).

### **Resources**

The data discussed in these two examples can be found in Appendix A under the sections on at-risk species/habitat, development trends (transportation and infrastructure), status and trends in habitat and land use, and water quality.

**Element 5:** A statement of aquatic resource goals and objectives for each service area, including a description of the general amounts, types and locations of aquatic resources the program will seek to provide

### **Background**

Program sponsors may consider organizing this section by the service areas outlined in Element 1. The goals, as well as the amounts, types and locations of aquatic resources that the program will seek to provide, should draw heavily from the analysis comparing historic aquatic resources (Element 3) to current resources (Element 4) and should take into consideration the threats section (Element 2). Several examples follow.

### **Examples**

#### Living River Restoration Trust

Living River Restoration Trust's Watershed Action Plan lists seven priority actions for achieving improvements to

<sup>148</sup>See: <http://alaskafisheries.noaa.gov/habitat/shorezone/szintro.htm>.

the Elizabeth River Ecosystem. Each priority action chapter lists goals for 2020 and 2014 and specific solutions to meet those goals. For example, in the chapter “Action 2: Restore and conserve wetlands, shellfish beds and forested shores,” the 2014 goals are:

- Develop a baseline for wetlands and forest cover.
- Chesapeake, Norfolk, Portsmouth and Virginia Beach develop a plan to retain wetlands despite sea level rise, through such means as obtaining land for “wetland retreat.”
- Elizabeth River Project: Restore 15 acres of wetlands; open the 40-acre Paradise Creek Nature Park with City of Portsmouth. US Army Corps of Engineers, Cities of Chesapeake, Norfolk, Portsmouth and Virginia Beach: Restore 17 acres of wetlands in four cities. Norfolk continue pro-active wetland restoration of sites including Myrtle Park, ODU Drainage Canal, 46th Street site, Haven Creek, Chesterfield Heights and Grandy Village. Virginia Beach: Achieve protection of priority sites, Greenway Plan for the Eastern Branch.
- Develop a land trust or other mechanism for accepting donated land for long-term conservation. Achieve long-term conservation of the highest priority conservation site in the watershed.
- Increase tree canopy by 10 percent.
- Enlist half of all shorelines in habitat restoration.
- Restore 20 additional acres of oyster reefs.

- Promote alternatives to plastic bags. Engage volunteers in regular litter removal.<sup>149</sup>

### North Carolina Ecosystem Enhancement Program

This section of North Carolina EEP’s framework states:

NCEEP works with stakeholders to develop aquatic resource goals and objectives at the initiation of the watershed planning effort. Once resource conditions and watershed functions are evaluated through existing datasets and watershed monitoring, goals and objectives are refined to better address identified watershed stressors.

NCEEP develops a **Watershed Management Plan** that identifies management strategies for stressors and identified problem areas. Strategies include stream and wetland restoration, enhancement and preservation, [Best Management Practice (BMPs)], as well as institutional measures undertaken by federal, state and local governments to improve and protect aquatic resources. A **Project Atlas** is developed that identifies projects for implementation by NCEEP and other parties. Each [Local Watershed Plan (LWP)] includes a table that summarizes stressors/ issues and the associated watershed goals and management strategies.<sup>150</sup>

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149 Elizabeth River Project and Virginia Department of Environmental Quality. “A Watershed Action Plan: The River of the Future.” Revised Third Edition ~ Executive Summary.

150 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

**Oregon Statewide Fee-in-Lieu Instrument**

**The Oregon Statewide Fee-in-Lieu Instrument (2008)<sup>151</sup> includes a statement of the aquatic resource goals and objectives and descriptions of the types (but not amounts and locations) of the aquatic resources the program will seek to provide in each HUC 3 and HUC 4 service area in the state. For example, the section for the Tualatin watershed, one of the watersheds identified as a high priority, includes the following analysis:**

The Tualatin River watershed drains 712 square miles. Fifteen percent of its area contains the urban areas of southwest Portland, Hillsboro, Tigard and Beaverton; 35% is in agricultural use near the center of the watershed; and 50% is forestland concentrated along its borders with Oregon's Coast Range, Tualatin Mountains and Chehalem Mountains. The population in Washington County has increased 14.8% in the last seven years (Population Research Center, 2008).

The Oregon Conservation Strategy identifies the Tualatin River (WV-05) area, which includes the Tualatin River and its floodplain from the Tualatin National Wildlife Refuge to Wapato Lake, east of Gaston. The area is a significant breeding area for migratory songbirds, an overwinter site for waterfowl, and a great blue heron nesting site. The Tualatin River National Wildlife Refuge has an authorized boundary encompassing 3,084 acres along 10 miles of the river. Currently, the refuge includes

almost 1,100 acres. Wapato Lake was historically one of the most important waterfowl sites in the Willamette Valley, and has high potential for wetland restoration. The [U.S. Fish and Wildlife Service] currently manages 150 acres of land in this historic lakebed. Recommended conservation actions include maintenance or restoration of riparian habitat and ecological function, and restoration of floodplain wetlands and riparian forests. Another opportunity area identified by [Oregon Department of Fish and Wildlife (ODFW)] is Banks Swamp (WV-02), a willow/ash wetland located along Highway 6 west of Banks, Oregon. Key species are riparian birds, willow flycatcher and winter steelhead.

Wetlands have been significantly reduced in number. A priority action is to address habitat fragmentation including preservation, restoration and enhancement of wetlands and floodplains; including emergent wetlands, scrub-shrub, wet prairies and riparian forests. Focal species include Northwestern pond turtles, red-legged frogs, Pacific salamander, bald eagle, peregrine falcon, water howellia, winter steelhead, and *Euonymus occidentalis* (burning bush).

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<sup>151</sup> Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

The major classifications of permitted wetland impacts (DSL) are:

support the ecological health and sustainability of a watershed, through the

HGM Class	Percent of Acres	Cowardin Class	Percent of Acres
Flat	41%	PEM	53%
Unknown	20%	Unknown	22%
Slope/Flat	11%		
Riverine Flow Through	10%		

Figure 4: Major classes of permitted wetland impacts (Oregon Statewide Fee-In-Lieu Instrument)

Limiting conditions include low summertime flows, increased peak flows and storm water management in urbanized areas, channelization of streams and disconnected floodplains, reduced riparian vegetation composition and extent, fragmented habitat, and water quality. The Tualatin Basin is water quality limited and has a TMDL for phosphorus, temperature, bacteria, dissolved oxygen, chlorophyll a, ammonia and pH. Limitations also exist for flow and habitat modifications, and biological criteria.

FIL projects should include as many of the functions as possible within priority wetland types and riparian areas, concentrating on expanding and connecting core habitat areas.

**Southeast Alaska Land Trust**

**The Southeast Alaska Land Trust draft compensation planning framework lists 10 aquatic resource goals for the overall program. These are:**

1. Preserve valuable aquatic habitats that provide important functions and

- acquisition of properties (fee simple title) or property rights (conservation easement)
2. Acquire valuable aquatic habitats where imminent development would lead to a loss of those habitats, impair the overall ecological health of a watershed, and conflict with community land use goals
3. Identify and acquire properties to meet compensatory mitigation obligations in an efficient and timely manner, so that SEAL Trust’s role as the ILF program sponsor in Southeast Alaska helps reduce conflicts between conservation and development, facilitates regulatory action and permitted development, and yields effective and high- quality preservation
4. Use scale efficiencies to aggregate the impacts from smaller, individual projects within the service area into mitigation through larger properties with greater ecological value
5. Seek properties adjacent to or within Southeast communities or remote “gems” (often private land originally

platted as homesteads in the early-mid 1900s) that provide functions similar to the impacted area which is typically the accessible, low-gradient and high-value shorelines (mudflats and estuaries)

6. Provide public benefit by directing mitigation resources toward the preservation of high-value habitats that also offer open space, passive recreation, drinking water protection, and other services to Southeast communities
7. Develop a mitigation site selection process that is ecologically based and relies on the best available information
8. Work efficiently and in a transparent manner with the Interagency Review Team to implement mitigation projects
9. Provide an efficient and timely accounting of in-lieu fees and mitigation projects
10. Provide long-term and permanent protection of valuable aquatic habitats on acquired properties through SEAL Trust's legal instruments and stewardship on properties we retain or properties transferred to a local or state land management agency<sup>152</sup>

The draft framework also lists wetland types that will be a focus for the program and provides an overview of land ownership in the region. The section also summarizes the importance of the watershed resources of the region on a local, regional, and global scale.

<sup>152</sup> Southeast Alaska Land Trust. 2008. Draft Compensation Planning Framework.

## Resources

The sources of information from which this element is developed should draw from those used in Elements 1, 2, 3, and 4. These can be found in Appendix A under at-risk species/habitat, development trends (transportation and infrastructure), status and trends in habitat and land use, and water quality.

### **Element 6: A prioritization strategy for selecting and implementing compensatory mitigation activities**

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## Background

The 2008 compensatory mitigation rule places significant emphasis on the selection of appropriate sites for compensation projects. The agencies state in the preamble that effective site selection at a landscape and watershed scale will help “increase the success and quality of aquatic resource restoration, establishment, and enhancement...”<sup>153</sup> In the general compensatory mitigation requirements section of the rule (§332.3), the agencies list six factors that should be considered in choosing “ecologically suitable” sites. These are:

- Hydrological conditions, soil characteristics, and other physical and chemical characteristics
- Watershed-scale features, such as aquatic habitat diversity, habitat connectivity, and other landscape scale functions

<sup>153</sup> See Compensatory Mitigation Rule (2008), Preamble p. 19605.

- The size and location of the compensatory mitigation site relative to hydrologic sources (including the availability of water rights) and other ecological features;
- Compatibility with adjacent land uses and watershed management plans
- Reasonably foreseeable effects the compensatory mitigation project will have on ecologically important aquatic or terrestrial resources (e.g., shallow sub-tidal habitat, mature forests), cultural sites, or habitat for federally- or state-listed threatened and endangered species
- Other relevant factors including, but not limited to, development trends, anticipated land use changes, habitat status and trends, the relative locations of the impact and mitigation sites in the stream network, local or regional goals for the restoration or protection of particular habitat types or functions (e.g., re-establishment of habitat corridors or habitat for species of concern), water quality goals, floodplain management goals, and the relative potential for chemical contamination of the aquatic resources

Although the rule does not provide additional guidance on the content of this aspect of the compensation planning framework, program sponsors should consider including maps of priorities with as much precision as possible. Sponsors should include detail about the wetland types they are most likely to protect and if preservation of specific resources is a priority, these areas should be identified here and justified in the following section.

## Examples

### New Hampshire In-Lieu Fee Program

The legislation establishing the New Hampshire state in-lieu fee program directs the Department of Environmental Services to promulgate regulations that include “Criteria to use in selecting projects that would compensate for the lost aquatic resource functions or values.”

The legislation, however, stipulates:

(a) Tidal aquatic resources shall be compensated by the selection of qualifying tidal projects.

(b) An emphasis shall be given to selecting from among the qualifying projects those that are nearer to the site of the lost aquatic resource.

(c) No project shall be funded with in lieu payments from losses that occurred outside the hydrologic unit code 8 watershed, as developed by the United States Geological Survey, in which the project is located.

(d) Such criteria shall be adopted in consultation with the site selection committee established under [Revised Statutes Annotated (RSA)] 482-A:32.<sup>154</sup>

Several of the pre-2008 in-lieu fee programs selected sites using a site selection committee. Such an arrangement helped to ensure that compensation projects met multiple natural resource conservation objectives. In New Hampshire, state legislation established such a site selection committee that must include among its members:

(a) The commissioner of the department of environmental services, or designee.

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154 RSA 482-A:31 (III).

- (b) The executive director of the fish and game department, or designee.
- (c) The director of the office of energy and planning, or designee.
- (d) The commissioner of the department of resources and economic development, or designee.
- (e) Four members of the public, appointed by the governor and council for a term of 3 years or until a successor is chosen. The members of the public shall be as follows:
  - 1. A member of a municipal conservation commission at the time of appointment, who shall be one of 3 nominees submitted by the New Hampshire Association of Conservation Commissions.
  - 2. A natural resource scientist, who shall be one of 3 nominees submitted by the New Hampshire Association of Natural Resource Scientists.
  - 3. A person with experience in environmental protection and resource management at the time of appointment, who shall be one of 3 nominees submitted by the Nature Conservancy.
  - 4. A person with experience in environmental protection and resource management at the time of appointment, who shall be one of 3 nominees submitted by the Society for the Protection of New Hampshire Forests.<sup>155</sup>

**North Carolina Ecosystem Enhancement Program**

**The North Carolina EEP’s draft compensation planning framework includes a**

**section titled “Prioritization strategy for selecting and implementing compensatory mitigation activities,” which reads as follows:**

NCEEP prioritizes compensatory mitigation activities within a particular [Geographic Service Area (GSA)] first in a LWP developed by NCEEP or watershed plan developed by other state, federal, tribal and/or local government agencies or appropriate non-governmental organization. If a watershed plan developed by an outside entity does not meet NCEEP’s six element criteria, NCEEP builds upon the existing planning effort in order to ensure it complies with NCEEP’s watershed plan criteria. If a watershed plan is not available in the [cataloging unit, or USGS HUC] of impact, and NCEEP determines substantial compensatory mitigation is required within the GSA, NCEEP will initiate a new LWP. If compensatory mitigation requirements for a GSA are too small to justify development of a new LWP and a watershed plan does not currently exist, NCEEP will focus projects within the [Targeted Local Watershed (TLW)] for that particular CU. Projects that are not located in an LWP or TLW will be reviewed by the IRT and at a minimum should reference the most recent [River Basin Restoration Priorities (RBRP)] for a particular basin and state how the proposed mitigation project addresses the restoration goals for that particular CU.

Through the watershed planning process, NCEEP prioritizes mitigation

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155RSA 482-A:32.



projects based upon watershed uplift, feasibility (e.g. project constraints, size) and stakeholder input. Prioritization focuses efforts in priority subwatersheds and may incorporate modeling data to determine which projects, or group of projects, address watershed stressors and will contribute to watershed improvements. Compensatory mitigation projects may include stream and wetland restoration, enhancement and preservation as well as BMPs. Due to the fact that many impacts to water quality, habitat and hydrology functions are tied to development pressures associated with urbanization, BMPs and alternative mitigation strategies may be highly ranked in urban watersheds based upon feasibility and the opportunity to provide watershed improvement. NCEEP implements projects identified in the Project Atlas and links project specific restoration goals and objectives to those identified in the LWP.<sup>156</sup>

### **Oregon Statewide Fee-in-Lieu Instrument**

**The Oregon Statewide Fee-in-Lieu Instrument (2008)<sup>157</sup> lists six criteria for evaluating projects for their ability “to provide appropriate compensatory mitigation for impacts to the waters of the U.S.” These are:**

- Likelihood of success: Funded projects must demonstrate a high likelihood of success through a sound wetland restoration, creation and/or enhancement concept. The water source for the site should be reliable. Threats from invasive species or vandalism should be low or manageable. The project will be evaluated for its ability to result in successful and sustainable net gain of wetland acreage and/or function, with limited maintenance. Restoration projects will receive priority due to the higher lift in function that can be achieved, and the higher success rate of these types of projects.
- Multiple objectives: The project will be evaluated for its ability to address multiple functions and services such as improvement of fish and wildlife habitat, support for rare species, flood attenuation, water quality improvement, and recreation or education values. The project should target native plant community diversity and natural processes. Greater functional gains will be given more preference.
- Supports regional conservation initiatives and is compatible with the surrounding landscape: Projects should be located where they pose minimal conflicts with adjacent land uses and where they meet regional conservation priorities, address limiting factors identified in watershed assessments, provide habitat corridors, and/or add to the effectiveness of nearby protected natural areas.
- Capacity of the applicant and the project team: The applicant must demonstrate that they have sufficient capacity and expertise to manage the project. The project team must have the necessary expertise and capacity to carry out pre-implementation

- Likelihood of success: Funded projects must demonstrate a high likelihood of success through a sound wetland

<sup>156</sup> North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

<sup>157</sup> Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

planning, restoration construction, follow-up monitoring and remediation of project problems.

- Fund leveraging and project costs: Collaborative funding from multiple sources is encouraged, but not necessary. The project budget should identify all sources of funding and in-kind services, and itemized list of components to be funded including planning, implementation, monitoring and accounting. Projects with a high wetland functional gain per dollar will be given preference.
- Long-term management: Suitable projects must have a plan for long-term management and stewardship. Long-term stewardship could be provided by a non-profit conservation organization, local government or other interested constituency.

**Element 7:** An explanation of how any preservation objectives identified above satisfy the criteria for use of preservation

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### Background

The 2008 compensatory mitigation rule defines preservation as “the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area

or functions.”<sup>158</sup> The rule states that compensation requirements can be met through “the methods of restoration, enhancement, establishment, and *in certain circumstances* preservation.”<sup>159</sup> Because preservation offers fewer “potential gains in terms of aquatic resource functions” as compared to restoration, its use is more limited. The rule further states that preservation may be used when all of the following five criteria are met:

1. The resources to be preserved provide important physical, chemical, or biological functions for the watershed
2. The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available
3. Preservation is determined by the district engineer to be appropriate and practicable
4. The resources are under threat of destruction or adverse modifications
5. The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust)<sup>160</sup>

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<sup>158</sup>Compensatory Mitigation Rule (2008), §332.2.

<sup>159</sup>Ibid., §332.3(a)(2). Emphasis added.

<sup>160</sup>Ibid., §332.3(h) et seq.

## Examples

### North Carolina Ecosystem Enhancement Program

The draft compensation planning framework for North Carolina EEP reiterates the five criteria outlined in the rule and adds:

Preservation projects identified in the Project Atlas will be linked to the watershed goals and objectives for water quality, habitat and hydrology. NCEEP will document that the preservation site is under threat of destruction or adverse modification. Stand alone preservation projects will be coordinated with the IRT.<sup>161</sup>

### Oregon Statewide Fee-in-Lieu Instrument The Oregon Statewide Fee-in-Lieu Instrument<sup>162</sup> states that:

Preservation of existing wetlands that support a significant population of rare plant or animal species, or that are a rare wetland type (S1 or S2 according to the Oregon Natural Heritage Program) may be proposed to generate credits. Credits may also be proposed for preservation or improvements of riparian areas, buffers and uplands if the resources in these areas are essential to maintain the ecological viability of a water of the U.S. Credits generated for preservation and buffers will be determined on a case-by-case basis through

<sup>161</sup> North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

<sup>162</sup> Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

negotiation between DSL and the Corps in consultation with the IRT.

**Element 8:** A description of any public and private stakeholder involvement in plan development and implementation, including coordination with federal, state, tribal and local aquatic resource management and regulatory authorities

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## Background

The role of diverse stakeholders in selecting in-lieu fee program priorities has long been a strength of this compensatory mitigation mechanism.<sup>163</sup> In-lieu fee programs that include broad stakeholder involvement and seek to satisfy multiple conservation agendas are likely to engender IRT support.

## Examples

### Living River Restoration Trust

The Living River Restoration Trust's Watershed Action Plan lists seven priority actions for achieving improvements to the Elizabeth River Ecosystem including one devoted to improving stakeholder involvement. Action 6, and its corresponding chapter, "Safeguard the river through integrated, protective public policies and regulations," lists specific goals and solutions for addressing this priority. For example, one of the listed solutions is to:

Create a forum for improving the integration and efficiency of environmental policies affecting the Elizabeth

<sup>163</sup> For examples, see ELI (2006), pp 35-38.

River by expanding the role of a multi-agency committee coordinated since 1998 by Hampton Roads Planning District Commission; the Elizabeth River Restoration Study Steering Committee (DONE – February 2008).<sup>164</sup>

### North Carolina Ecosystem Enhancement Program

The North Carolina EEP's draft compensation planning framework states that the program "initiates stakeholder involvement at the beginning of the watershed planning effort." The composition of the stakeholder group that is engaged varies depending on "the region and level of interest expressed by different organizations/agencies." The framework states that the stakeholders include both public and private entities and provides an exhaustive list of the 25 minimum public and private entities that will be engaged. EEP states that these entities will be contacted about the watershed planning process and will be updated "at plan initiation and following completion of the Watershed Assessment Report and Watershed Management Plan and Project Atlas." The framework also suggests that the program may establish a Technical Advisory Committees composed of some combination of these groups "to assist EEP in plan development and implementation."<sup>165</sup>

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<sup>164</sup> Elizabeth River Project and Virginia Department of Environmental Quality. "A Watershed Action Plan: The River of the Future." Revised Third Edition ~ Executive Summary.

<sup>165</sup> North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

### Southeast Alaska Land Trust

**The Southeast Alaska Land Trust draft compensation planning framework states:**

As a preliminary effort at outreach to interested parties in the Southeast Alaska region, SEAL Trust will send a letter describing our ILF Program, this Compensation Planning Framework, and the pending public review of SEAL Trust's request for an ILF instrument modification. SEAL Trust will conduct this initial outreach to several Southeast Alaska organizations (e.g., watershed councils and Southeast Conference), Native Corporation land managers, Southeast community land use/planning officials, and other resource and real estate professionals (see Appendix F Stakeholders and Outreach). Our goal is to explain SEAL Trust's existing, legal agreement with the CORPS, our ILF Program actions to date, and the purpose of the compensatory planning framework within the context of SEAL Trust's role in regional aquatic resource conservation, community land use planning, and future resource development on private and public lands. We will invite their questions or comments, provide a link to our website if they want to review our documents, and we intend to incorporate information received into our documents as the review process proceeds. As an ongoing outreach effort, SEAL Trust intends to identify opportunities where it may be able to either make a presentation or have an exhibitor booth to describe SEAL Trust's ILF program and its

involvement in Corps compensatory mitigation in the Southeast Alaska service area (e.g., Southeast Conference's yearly mid-winter meeting in Juneau, and the Alaska Coastal Management Program annual conference).<sup>166</sup>

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**Element 9: A description of the long term protection and management strategies for activities conducted by the in-lieu fee program sponsor**

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**Background**

The 2008 compensatory mitigation rule provides extensive information on what the agencies expect to be included in the long-term protection and management section of the instrument (§332.7(d)). The rule states that the instrument must: 1) identify the party responsible for ownership and all long-term management of the compensatory mitigation project; 2) include a description of long-term management needs, annual cost estimates for these needs, and identify the funding mechanism that will be used to meet those needs; and 3) specify what long-term financing mechanisms will be used, such as non-wasting endowments, trusts, contractual arrangements with future responsible parties, and other appropriate financial instruments.

**Examples**

North Carolina Ecosystem Enhancement Program

The North Carolina EEP's draft compensation planning framework states:

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166 Southeast Alaska Land Trust. 2008. Draft Compensation Planning Framework.

Mitigation sites that are used to satisfy compensatory mitigation requirements are surveyed and demarcated and remain within the public domain in fee simple title in perpetuity and/or have appropriate preservation mechanisms in perpetuity, approved by the [District Engineer], placed on the sites. Project sites are managed in accordance with the long-term management plan included within the mitigation plan or report for the property.

NCEEP transfers responsibility for the long-term management of mitigation sites to the NCDENR Stewardship Program and provides funding to the Stewardship Program for monitoring (to ensure site integrity and inspect for easement breaches) legal protection and defense, and biological management activities (affirmative activities or remedial actions to maintain conservation value) as specified in the mitigation plan. With approval by the DE, NCEEP may transfer ownership or management responsibilities of mitigation site properties to appropriate non-profit conservation organizations, local governments, or land trusts for management and monitoring. NCEEP is responsible for ensuring that the conservation easement is re-recorded to ensure that NCEEP remains within the chain of title.<sup>167</sup>

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167 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

**Oregon Statewide Fee-in-Lieu Instrument**

**The “Long-Term Ownership and Protection” section of the Oregon Statewide Fee-in-Lieu Instrument states that:**

DSL shall be responsible for ensuring long-term protection of each FIL project.

On publicly owned property, long term protection may be provided through facility management plans or integrated natural resource plans. On privately held property, including property held by conservation organizations, real estate instruments shall be recorded. DSL will ensure that such protection mechanisms are in place prior to site closure or final credit release, as stipulated in each mitigation plan. The draft conservation easement or equivalent protection mechanism shall be submitted to the IRT for review.

Where permanent legal property protection instruments are appropriate, conservation easements will be held by entities such as Federal, Tribal, other State or local resource agencies, or non-profit conservation organizations. The protection mechanism shall assign long-term stewardship roles and responsibility for the project and will, to the extent practicable, prohibit incompatible uses that might otherwise jeopardize the objectives of the FIL project. Copies of such recorded instruments shall be sent to the Corps and become part of the official project record. Each protection instrument shall contain a provision requiring notification to DSL

and the District Engineer if any action is taken to void or modify it.<sup>168</sup>

**The “Maintenance Provisions” component of the instrument states:**

FIL projects will be designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved. DSL shall be responsible for maintaining FIL projects, consistent with the appropriate mitigation plan, to ensure their long-term viability as functional aquatic resources.

DSL shall retain such responsibility unless and until the long-term project responsibility is formally transferred to an approved long-term steward. The long-term management plan to be developed for each FIL project will include a description of anticipated management needs with annual cost estimates and an identified funding mechanism (such as non-wasting endowments, trusts, contractual arrangements with future responsible parties, or other appropriate financial instruments).<sup>169</sup>

**Southeast Alaska Land Trust**

**The Southeast Alaska Land Trust draft compensation planning framework<sup>170</sup> states:**

SEAL Trust has several legal mechanisms whereby its ILF Program compensatory mitigation properties

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168 Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008. p. 18.

169 Ibid., p. 17.

170 Southeast Alaska Land Trust. 2008. Draft Compensation Planning Framework.

would receive long-term protection and management:

- SEAL Trust executes and holds a conservation easement on certain properties with willing public or private landowners.
- SEAL Trust retains ownership of a property obtained through fee simple purchase.
- SEAL Trust donates a property acquired through fee simple purchase to an appropriate public agency with deed restrictions (per 2008 Mitigation Rule 33 CFR 332.7(a)).

Under the ILF Program, the management plan or terms of a conservation easement would describe the conservation values and permitted/prohibited uses for each property. On all properties, SEAL Trust would perform annual stewardship monitoring with onsite field observations, reporting, and enforcement actions, as appropriate.

**Element 10: A strategy for periodic evaluation and reporting on the progress of the program in achieving the goals and objectives above, including a process for revising the planning framework as necessary**

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## Background

Program sponsors should include a brief description of how and when they will update the goals and objectives of the program, as well as parts of the entire framework. This section would allow sponsors to update the plans based on

changing land uses, development trends, water quality trends, etc.

## Examples

### North Carolina Ecosystem Enhancement Program

The North Carolina EEP's draft compensation planning framework states:

NCEEP will provide annual reports to the IRT with updates on the progress of each watershed plan and project implementation. Information on NCEEP's watershed planning efforts, including watershed plan products searchable by county or river basin is available on NCEEP's website: <http://www.nceep.net/pages/lwplanning.htm>. NCEEP maintains a list of projects implemented in watershed planning areas. These may include projects identified in plans produced by NCEEP (previously produced or current), projects located in watershed planning areas, but not identified in a project atlas and projects located in watershed plans produced by entities outside of NCEEP.

Each restoration plan developed for a project identifies the watershed plan associated with the project and links project specific goals and objectives to the goals and objectives identified in the watershed plan.<sup>171</sup>

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171 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

**Southeast Alaska Land Trust**

**The Southeast Alaska Land Trust draft  
compensation planning framework  
states:**

In general, SEAL Trust does not see major changes in the Southeast Alaska economy in the foreseeable future that would drive a significantly different outlook for community or resource development in the region. With this outlook, we do not anticipate the need for a revision to this Compensation Planning Framework for a number of years. SEAL Trust staff and Board of Directors intend to evaluate its ILF program as part of periodic reviews of its land trust responsibilities and strategic planning, but certainly will wait until SEAL Trust, the IRT, other interested parties, and permittees gain some experience with the 2008 Mitigation Rules and their roles in compensatory mitigation in the Southeast Alaska region. As part of this overall evaluation, SEAL Trust would examine its efforts in achieving the previously identified goals and objectives of the Trust's ILF Program (see pages 24-25).<sup>172</sup>

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172 Southeast Alaska Land Trust. 2008. Draft Compensation Planning Framework.



## 7. Advance Credits

- “For an in-lieu fee program, a complete draft instrument must include...Specifications of the initial allocation of advance credits and a draft fee schedule for the credits, by service area, including an explanation of the basis for the allocation and fee schedule” (§332.8(d)(6)(iv)(B))

### Background and definitions

The section of the instrument regarding advance credits must first be included in the draft instrument.<sup>173</sup> As a result, the program sponsor will have the opportunity to consider feedback from the IRT before finalizing the accounting procedures in the instrument.

A common criticism of pre-2008 in-lieu fee programs was that since they were permitted to accept fees in advance of providing compensation, the programs contributed to a temporal loss of aquatic resources. Prior to 2008, many in-lieu fee program instruments included a timetable in which compensatory mitigation should be completed.<sup>174</sup> Few of these programs, however, limited the number of credits that could be sold in advance of initiating or completing compensatory mitigation projects on-the-ground.<sup>175</sup>

One of those that did, the Sugar Creek Wetland/Watershed In-Lieu Fee Mitigation Initiative in Ohio, was authorized to sell thirty percent of the program’s total anticipated wetland mitigation credits (and additional credits as approved by

the Corps on a case-by-case basis) prior to conducting mitigation. The program was required to complete the compensatory mitigation projects within one full growing season from the date of the sale of the first credit. The remaining anticipated wetland mitigation credits could be sold only after the compensatory mitigation projects were underway.<sup>176</sup> Similarly, the Historic Ricefields In-Lieu Fee Program of South Carolina was authorized to sell up to 250 credits per year in addition to specific credits approved by the MBRT. The instrument stipulated that all of the required compensatory mitigation had to be completed within two years of collecting fees.<sup>177</sup>

The 2008 rule acknowledges that there are several inherent differences between mitigation banking and in-lieu fee programs, and they both offer their own set of benefits.<sup>178</sup> For example, in-lieu fee programs “provide compensatory mitigation at multiple sites within multiple service areas, and may serve areas

<sup>173</sup> Compensatory Mitigation Rule (2008), §332.8(d)(6)(iv)(B).

<sup>174</sup> ELI (2006), p. 49.

<sup>175</sup> *Ibid.*, p. 50.

<sup>176</sup> The Wilderness Center, Sugar Creek Wetland/Watershed In-Lieu Fee Mitigation Initiative, Ohio (2004).

<sup>177</sup> Historic Ricefields Association, Historic Ricefields Association In-Lieu Fee Mitigation Program, South Carolina (2000).

<sup>178</sup> See Compensatory Mitigation Rule (2008), Preamble p. 19614 for a full discussion of the inherent differences between mitigation banks and in-lieu fee programs.

where a mitigation bank is not economically viable...”<sup>179</sup> In turn, in-lieu fee programs “have fewer up-front planning requirements than mitigation banks, and are not expected to be operated as commercial ventures.” In fact, the rule limits the sponsorship of in-lieu fee programs specifically to governmental or non-profit natural resource management entities, which, presumably, do not have access to the same sources of capital as do banks and need to collect sufficient fees before they can undertake projects.<sup>180</sup> For this reason, “in-lieu fee programs, but not banks, are allowed to sell advance credits.”<sup>181</sup>

**The rule defines advance credits as:**

any credits of an approved in-lieu fee program that are available for sale prior to being fulfilled in accordance with an approved mitigation project plan. Advance credit sales require an approved in-lieu fee program instrument that meets all applicable requirements including a specific allocation of advance credits, by service area where applicable. The instrument must also contain a schedule for fulfillment of advance credit sales.<sup>182</sup>

**How many advance credits an in-lieu fee program may sell is determined by the Corps in consultation with the IRT.**<sup>183</sup>

The amount of advance credits must also be specified – for each separate service area – in the instrument.<sup>184</sup> The number of advance credits must be based on consideration of three factors: 1) The compensation planning framework; 2) The sponsor’s past performance for implementing aquatic resource restoration, establishment, enhancement, and/or preservation activities in the proposed service area or other areas; and 3) The projected financing necessary to begin planning and implementation of in-lieu fee projects.<sup>185</sup> When determining the number of advance credits for a particular service area, the sponsor may be required to provide the Corps with supporting information that will remain confidential. For example, the sponsor may need to provide detailed information about prospective in-lieu fee sites to demonstrate that the number of proposed advance credits is reasonably achievable.<sup>186</sup>

The preamble to the rule states that “[these requirements do] not mean that the number of advance credits will necessarily be small.”<sup>187</sup> The rule provides two examples of how the districts might determine the number of advance credits to allow program sponsors to sell (see BOX 2).

Advance credits can be sold once the instrument is approved. A mitigation site need not be secured and a mitigation plan need not be approved before

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179 Compensatory Mitigation Rule (2008), Preamble p. 19614.

180 See definition of “in-lieu fee program” at Compensatory Mitigation Rule (2008), §332.2.

181 Compensatory Mitigation Rule (2008), Preamble p. 19615.

182 Ibid., §332.2.

183 Ibid., §332.8(n)(1).

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184 Ibid.

185 Ibid.

186 Ibid., §332.8(n)(2).

187 Ibid., Preamble p. 19658.

**BOX 2: Examples – Determining number of advance credits**

In service areas with larger numbers of permitted impacts, and where a sponsor with demonstrated past successes is likely to produce a substantial amount of compensatory mitigation within the time frame specified in §332.8(n)(4) [§230.98(n)(4)], district engineers can authorize a higher number of advance credits. If an in-lieu fee program is being established by a sponsor that does not have a history of successfully implementing aquatic resource restoration, establishment, enhancement, and/or preservation projects, the district engineer may authorize a smaller number of advance credits to address potential risks.

Source: *Paraphrased from Compensatory Mitigation Rule (2008), Preamble p. 19658.*

advance credits can be sold.<sup>188</sup> The credit release schedule for each in-lieu fee project must be included in the project-specific mitigation plan, rather than the in-lieu fee instrument. As the milestones in the schedule are reached (i.e., the in-lieu fee project is implemented), *advance credits* convert to *released credits*.<sup>189</sup> The preamble also states that before any credits can be released and used to fulfill advance credits (or before they can be sold to permittees), “real estate instruments, management plans, or other long-term protection mechanisms used for long-term protection must become finalized...”<sup>190</sup>

Once the in-lieu fee sponsor has sold all of its advance credits, however, no more advance credits can be sold “until an

equivalent number of credits, tied to a specific site and mitigation plan, has been released in accordance with an approved credit release schedule.”<sup>191</sup> After the initial release of advance credits, “released” credits are generated as the site begins to meet performance standards. Those released credits would first fulfill any advance credits that have been sold. Once those advance credits are fulfilled, an equal number of advance credits are reallocated to the sponsor for sale or transfer – much like a revolving charge account.<sup>192</sup>

In theory, the sale of advance credits results in a longer lag time between when impacts occur and compensation is provided than with mitigation banks. In order to counterbalance this characteristic of in-lieu fee programs and to

<sup>188</sup>Ibid., Preamble p. 19612.

<sup>189</sup>Ibid., Preamble p. 19622.

<sup>190</sup>Ibid., Preamble p. 19664.

<sup>191</sup>Ibid., Preamble p. 19612 and §332.8(n)(3).

<sup>192</sup>Ibid., §§332.2 and 332.8(n)(3).

**Box 3: Definitions**

*Fulfillment of advance credit sales of an in-lieu fee program* means application of credits released in accordance with a credit release schedule in an approved mitigation project plan to satisfy the mitigation requirements represented by the advance credits. Only after any advance credit sales within a service area have been fulfilled through the application of released credits from an in-lieu fee project (in accordance with the credit release schedule for an approved mitigation project plan), may additional released credits from that project be sold or transferred to permittees. When advance credits are fulfilled, an equal number of new advance credits are restored to the program sponsor for sale or transfer to permit applicants.

*Release of credits* means a determination by the district engineer, in consultation with the IRT, that credits associated with an approved mitigation plan are available for sale or transfer, or in the case of an in-lieu fee program, for fulfillment of advance credit sales. A proportion of projected credits for a specific mitigation bank or in-lieu fee project may be released upon approval of the mitigation plan, with additional credits released as milestones specified in the credit release schedule are achieved.

Source: *Compensatory Mitigation Rule (2008)*, §332.2.

“help ensure that the collected funds are used in a timely manner to initiate compensatory mitigation projects,”<sup>193</sup> the rule gives the Corps the authority cap the number of advance credits that can be sold<sup>194</sup> and requires that the sponsor complete land acquisition and initial physical and biological improvements by the third full growing season after the sale of advance credits in that service area.<sup>195</sup>

If the program sponsor fails to complete the land acquisition and initial physical and biological improvements by the third full growing season after the sale of advance credits, the district engineer “must direct the sponsor to disburse funds from the in-lieu fee program account to provide alternative compensatory mitigation to fulfill those compensation obligations.”<sup>196</sup> The funds could, for example, be distributed to one or a number of recipients including one or more mitigation bankers or other mitigation providers. The district engineer

193Ibid., Preamble p. 19615.

194Ibid., §332.8(n)(1).

195Ibid., §332.8(n)(4).

196Ibid.

does, however, have the authority to extend the amount of time that the sponsor has to implement a project.<sup>197</sup>

Although the 2008 compensatory mitigation rule gives in-lieu fee program sponsors the authority to sell advance credits, they are not required to do so. In fact, some in-lieu fee programs have not requested and do not propose to sell advance credits. For example, the Oregon Department of State Land's program does not plan to sell advance credits. Instead, credits will be available as projects meet their performance standards.<sup>198</sup>

## Examples of advance credit provisions

### North Carolina Ecosystem Enhancement Program

In its "Advanced Credits Allocation" section, the North Carolina EEP draft instrument states:

Pursuant to 33 CFR Part 332, the following number of Advance Credits have been allocated by river basin for use by NCEEP. NCEEP will provide an annual Advance Credit debit ledger that provides the amount of Advance Credits that have been utilized during the prior year.<sup>199</sup>  
(See Figure 5.)

<sup>197</sup>Ibid.

<sup>198</sup>Martin, Steve. Personal communication. November 25, 2009.

<sup>199</sup>North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

### Virginia Aquatic Resources Trust

The amended Virginia Aquatic Resources Trust Fund's agreement, approved in 2003, requires the program to allocate funds from the account to specific projects "within three years of the date the funds are received by the Conservancy." If the project sponsor fails to do so, the agreement states that the Corps "may direct that the funds be allocated to another Conservancy project or another non-profit entity ..." <sup>200</sup>

## Sample language

Upon approval of this instrument for (ILF Program), (Program Sponsor) is permitted to sell advance credits in the amount indicated in the chart below. The number of advance credits available for sale varies by service area, as indicated. The number of advance credits available for sale is specified by service area, as indicated in the chart.

As the milestones in the schedule are reached (i.e., restoration, creation, enhancement and/or preservation is implemented), advance credits convert to released credits. At a minimum, credits will not be released until (Program Sponsor) has obtained IRT approval of the mitigation plan for the site, has achieved the applicable milestones in the credit release schedule, and the credit releases have been approved by the district engineer.

<sup>200</sup>Amendment to the Memorandum of Understanding Between The Nature Conservancy and the U.S. Army Corps of Engineers [Norfolk District]. (December 18, 2003).

Once (Program Sponsor) has sold all of its advance credits, no more advance credits may be sold until an equivalent number of credits has been released in accordance with the approved credit release schedule outlined in a project-specific mitigation plan. Once all advance credits are fulfilled, an equivalent number of advance credits may be made available for sale, at the discretion of the district engineer and IRT.

(Program Sponsor) shall complete land acquisition and initial physical and biological improvements by the third full growing season after the sale of advance credits. If (Program Sponsor) fails to meet these deadlines, the district engineer must either make a determination that more time is needed to plan and implement an in-lieu fee project or, if doing so would not be in the public interest, direct (Program Sponsor) to disburse funds from the (ILF Program) program account to provide alternative compensatory mitigation to fulfill those compensation obligations.

River Basin	Stream Credits	Wetland Credits
Broad	50,000	25
Cape Fear	170,000	635
Catawba	145,000	60
Chowan	20,000	80
French Broad	60,000	20
Hiwassee	20,000	20
Little Tennessee	20,000	20
Lumber	20,000	155
Neuse	55,000	515
New	30,000	20
Pasquotank	20,000	215
Roanoke	20,000	20
Savannah	20,000	20
Tar-Pamlico	20,000	20
Watauga	20,000	50
White Oak	20,000	195
Yadkin	165,000	155

Figure 5: Advance credits by river basin (North Carolina Ecosystem Enhancement Program)

## 8. Method for Determining Project-Specific Credits and Fees & Draft Fee Schedule

- “For an in-lieu fee program, a complete draft instrument must include... a draft fee schedule for [the advance credits], by service area, including an explanation of the basis for the allocation and draft fee schedule;” (§332.8(d)(6)(iv)(B))
- The draft instrument must include: “A methodology for determining future project-specific credits and fees;” (§332.8(d)(6)(iv)(C))

### Background and definitions

The section of the instrument regarding the fee schedule and project-specific credits and fees must first be included in the draft instrument.<sup>201</sup> If the final instrument is approved, the sponsor will rely on the methodology for determining credits and fees to ensure that the in-lieu fee program collects sufficient funds to plan, implement, and if necessary manage, in-lieu fee projects that are used to offset losses of waters of the United States authorized by DA permits. The program sponsor will have the opportunity to incorporate feedback from the IRT before finalizing the accounting procedures in the instrument.

### Fee schedule

The fee schedule section of the instrument must document the amount that the program sponsor charges permittees for credits. There are often different fees based on the type of aquatic resource credits being purchased, the location of the compensation project, and the size of the impacts. The 2008 compensatory

201 Compensatory Mitigation Rule (2008), §§332.8(d)(6)(iv)(C) and 332.8(d)(6)(iv)(B).

mitigation rule states that the fee schedule must be set by the program sponsor, rather than the Corps, although the Corps may evaluate the fees to ensure that they satisfy the requirements listed below in §332.8(o)(ii). Prior to 2008, the Corps played a role in setting the fees for several programs.<sup>202</sup>

### Determining credits

The 2008 compensatory mitigation rule defines credits as:

a unit of measure (e.g., a functional or areal measure or other suitable metric) representing the accrual or attainment of aquatic functions at a compensatory mitigation site. The measure of aquatic functions is based on the resources restored, established, enhanced, or preserved.<sup>203</sup>

Credits may be defined in acres, linear feet, or functional assessment units linked to acres or linear feet.<sup>204</sup> The rule states that “an appropriate assessment method (e.g., hydrogeomorphic approach

202 ELI (2006). p. 44.

203 Compensatory Mitigation Rule (2008), §332.2.

204 Ibid., §332.8(o)(1).

to wetlands function assessment, index of biological integrity) or other suitable metric must be used to assess and describe the aquatic resource types that will be restored, established, enhanced, and/or preserved by the...in-lieu fee project.”<sup>205</sup> The instrument must detail the methodology used by the program for determining how credits are measured. The cost per unit of credit is the fee that is charged for each credit.

The agencies feel that restoration offers a higher likelihood of success than establishment and that the aquatic resource gains are greater through restoration than through enhancement or preservation. As a result, the rule states that restoration “should generally be the first option considered...”<sup>206</sup> Credits generated through restoration are generally preferred and offered at a lower ratio (for example, one acre of restoration equals one credit, five acres of enhancement equal one credit, ten acres of preservation equal one credit).

If the permittees plan to purchase credits from an in-lieu fee provider that are generated through preservation, the Corps “should apply a higher mitigation ratio...,” or require the permittee purchase additional credits.<sup>207</sup> In addition, preservation may only be used to provide compensatory mitigation when five criteria are met:

1. The resources to be preserved provide important physical, chemical, or biological functions for the watershed

2. The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available
3. Preservation is determined by the district engineer to be appropriate and practicable
4. The resources are under threat of destruction or adverse modifications
5. The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust)<sup>208</sup>

The agencies also strongly encourage mitigation providers to undertake preservation in “conjunction with aquatic resource restoration, establishment, and/or enhancement activities.”<sup>209</sup>

The rule also addresses the type of resources that can generate credits. Non-aquatic resources – such as riparian areas, buffers, and uplands – may only be used to generate credits when they are “essential to maintaining the ecological viability of adjoining aquatic resources.”<sup>210</sup> Credits may only be awarded to projects carried out on public lands if they are “based solely on aquatic resource functions provided by the compensatory mitigation project, over and above those

205 Ibid., §332.8(o)(2).

206 Ibid., §332.3(a)(2).

207 Ibid., §332.8(o)(6).

208 Ibid., §332.3(h)(1) et seq.

209 Ibid., §332.3(h)(2).

210 Ibid., §§332.3(i) and 332.8(o)(7).



provided by public programs already planned or in place.”<sup>211</sup>

## Determining fees

Much criticism has been levied against in-lieu fee programs over the years for setting credit prices too low and failing to cover all of the costs necessary to deliver the promised mitigation. Many of the in-lieu fee programs under scrutiny were sponsored by public agencies, which drew concerns that the credits costs did not include expenses for program administration, long-term maintenance of projects, and corrective action. The fear was that low credit prices for in-lieu fee credits may have undercut mitigation bank credit prices and created unfair competition. In response, the rule states that the cost per credit must be based on “full cost accounting” – all the costs associated with the restoration, establishment, enhancement, and/or preservation of aquatic resources. The rule lists the specific activities that may be considered in setting credit fees. These are:

- Land acquisition
- Project planning and design
- Construction
- Plant materials
- Labor
- Legal fees
- Monitoring
- Remediation or adaptive management activities
- Program administration
- Contingency costs appropriate to the stage of project planning, including

uncertainties in construction and real estate expenses

- The resources necessary for the long-term management and protection of the in-lieu fee project
- Financial assurances that are necessary to ensure successful completion of in-lieu fee projects<sup>212</sup>

## Examples of fee schedules

### Oregon Statewide Fee-in-Lieu Program

The Oregon Statewide Fee-in-Lieu program’s fee schedule is included in document provided on the agency’s web site. Effective on or after July 1, 2009, the rate for payment to the fund is \$83,000 per acre.<sup>213</sup> It continues by saying:

The median prices reported to us this year by the 16 active mitigation banks ranged from \$54,432 to \$175,000 per full acre, and many of the banks reported various sliding fee schedules in which purchasers of smaller amounts pay a higher rate. The prices were weighted by the number of credits available from each bank to arrive at the [State Wetland Mitigation Bank Revolving Fund] price.

### North Carolina Ecosystem Enhancement Program

The North Carolina EEP Draft Instrument states that the credit fees are established pursuant to state law and regulations.<sup>214</sup> The regulations establish

212 Ibid., §332.8(o)(5)(ii).

213 Oregon Department of State Lands. “Price Change for In-Lieu Mitigation.” [http://www.oregon.gov/DSL/PERMITS/docs/PIL\\_RATES.doc](http://www.oregon.gov/DSL/PERMITS/docs/PIL_RATES.doc). (Last visited October 23, 2009.)

214 N.C.G.S. 143-214.11; 15A NCAC 2R .0402.

211 Ibid., §332.3(a)(3).

two separate fee structures for non-coastal aquatic resources. For one set of specified 8-digit hydrologic unit codes, the following fee structure applies:

- Surface waters other than wetlands = \$323.00 per linear foot
- Wetlands = \$43,000 per acre for non-riparian wetlands; \$59,600 per acre for riparian wetlands

For the remaining 8-digit hydrologic unit codes, the following fee structure applies:

- Surface waters other than wetlands = \$244.00 per linear foot of stream
- Wetlands = \$22,113 per acre for non-riparian wetlands; \$33,696 per acre for riparian wetlands

And for all coastal wetlands, the following fee structure applies:

- Coastal wetlands = \$146,615.00 per acre

#### New Hampshire In-Lieu Fee Program

The New Hampshire state in-lieu fee program, established by the state legislature in 2006, sets forth a fee schedule in the legislation as follows:

For freshwater and tidal wetlands losses, the in lieu payment shall be the sum of: I. The cost that would have been incurred if a wetland of the same type was constructed at the ratios adopted by the department based on a price of \$65,000 per acre of wetland created, to be adjusted at the beginning of the calendar year according to the annual simple rate of interest on judgments established by RSA 336:1;

II. The area of wetlands, as used in the calculation performed under

paragraph I, times the cost of land in the municipality where the impact is occurring as calculated by the total assessed land values in the municipality, as determined by the department of revenue administration, which are equalized, divided by the number of acres in the municipality to yield a per acre equalized land value; and III. An administrative assessment which equals 5 percent of the sum of paragraphs I and II.<sup>215</sup>

#### Maine In-Lieu Fee Program

The Maine state in-lieu fee program utilizes the following rates:

The ILF resource compensation rates for the period July 1, 2009 thru June 30, 2011 shall be as outlined, in Table 1 [see Figure 6]. All resource compensation fees shall be calculated using the resource dependant formulas outlined below based on the rates provided in Table 1 and a resource multiplier. The resource multiplier is an adjustment factor that reflects the significance of specific resources. The resource multiplier shall be 1 except as follows:

1. A resource multiplier of 2 shall be used for:
  - a. Wetlands areas containing at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water, except for artificial ponds or impoundments;
  - b. Peatlands dominated by shrubs, sedges and sphagnum moss;
  - c. Coastal wetlands;

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215 RSA 482-A:30.

- d. Inland wading bird & waterfowl habitat (IWWH); and
  - e. Tidal wading bird and waterfowl habitat (TWWH); and
2. A resource multiplier of 4 shall be used for vernal pools and shorebird habitat
- **Wetland Compensation Formula:**  
Wetland compensation fee = (direct wetland degradation/s.f. x (wetland creation cost/s.f. + assessed land valuation/s.f.)) x (resource multiplier)
  - **Vernal Pool Compensation Formula:**  
Vernal pool compensation fee = (direct wetland degradation/s.f. x (wetland creation cost/s.f. + assessed land valuation/s.f.)) + (upland vernal pool habitat degradation/s.f. x land valuation/s.f.) x (resource multiplier)  
[Note: Any proposed project that must directly impact a portion of a vernal pool aquatic habitat must compensate for the entire significant vernal pool habitat area.]

**Resource Compensation Rate 7/1/09 through 6/30/11**

County	Wetland Creation/sq. ft.	Assessed Land Value/sq. ft.*	Assessed Coastal Land Value/sq. ft.*
Androscoggin	\$3.42	\$0.14	N/A
Aroostook	\$2.87	\$0.01	N/A
Cumberland	\$3.42	\$0.65	\$1.52
Franklin	\$2.87	\$0.05	N/A
Hancock	\$2.87	\$0.21	\$0.36
Kennebec	\$3.42	\$0.12	\$0.18
Knox	\$3.42	\$0.31	\$0.44
Lincoln	\$3.42	\$0.30	\$0.71
Oxford	\$3.42	\$0.06	N/A
Penobscot	\$2.87	\$0.05	\$0.26
Piscataquis	\$2.87	\$0.03	N/A
Sagadahoc	\$3.42	\$0.25	\$0.34
Somerset	\$3.42	\$0.03	N/A
Waldo	\$3.42	\$0.08	\$0.21
Washington	\$2.87	\$0.03	\$0.06
York	\$3.42	\$0.44	\$1.20

\* Figure based on 2007 MRS statistical summary

Figure 6: “Resource Compensation Rate 7/1/09 through 6/30/11” (Maine In-Lieu Fee Program)

- **Inland Wading Bird and Waterfowl (IWWH) Compensation Formula:**  
IWWH compensation fee = (direct wetland degradation/s.f. x (wetland creation cost/s.f. + assessed land valuation/s.f.)) + (upland IWWH habitat degradation/s.f. x land valuation/s.f.) x (resource multiplier)
- **Tidal Wading Bird and Waterfowl (TWWH) Compensation Formula:**  
TWWH compensation fee = (TWWH zone of influence/s.f. x land valuation/s.f.) x (resource multiplier)  
[ \* Note: The “zone of influence” includes all mapped TWWH habitat area within 300’ of the proposed new pier, ramp and float. TWWH function and value is lost or highly degraded within the “zone of influence”. ]
- **Shorebird Habitat Compensation Formula:**  
Shorebird habitat compensation fee = (upland buffer degradation or zone of influence impact/s.f. x land valuation/s.f.) x (resource multiplier)  
[ \* Note: The “zone of influence” includes all mapped shorebird habitat area within 300’ of the proposed new pier, ramp and float. Shorebird habitat function and value is lost or highly degraded within the “zone of influence”. ]

## Examples of methods for determining project-specific credits and fees

More than a third of the pre-2008 in-lieu fee agreements included specific or fairly specific information about how fees would be assessed and close to half of the programs stated that the assessed fees would include the costs of land acquisition. Four of the programs authorized in the Corps’ Los Angeles District used similar language and refer to the national no net loss goal.

### San Gabriel River Watershed Aquatic Resource In-Lieu Fee Program

The agreement establishing the San Gabriel River Watershed Aquatic Resource In-Lieu Fee Program states:

The [San Gabriel Mountains Regional Conservancy (SGMRC)] shall determine the cost-per-acre for the required mitigation. To meet the federal goal of ‘no net loss’ of the nation’s aquatic resource functions and values, the cost-per-acre must be sufficient to cover the expected costs of compensatory mitigation. Accordingly, the cost per acre should be based on a reasonable estimate of funds needed for land acquisition, project planning, construction, monitoring, maintenance and contingencies.<sup>216</sup>

216 Memorandum of Agreement Between the U.S. Army Corps of Engineers, Los Angeles District and the San Gabriel Mountains Regional Conservancy Regarding the Establishment and Operation of the San Gabriel River Watershed Aquatic Resource In-Lieu Fee Program. (September 2, 2004.) § 6.2.

**Oregon Statewide Fee-in-Lieu Instrument**  
**The Oregon Statewide Fee-in-Lieu Instrument (2008) includes the following section on its methodology for determining project-specific credits and fees:**

DSL may only generate credits from a FIL project when there is a net benefit to aquatic resources at the site as determined by the difference between pre- and post- site conditions, and the benefit is in excess of any existing State mitigation obligation in the project's Oregon Water Resources Department sub-basin.

Credit generation may be based on the standard mitigation ratios established in DSL rules, or based on a functional assessment and evaluation methodology approved by the Corps. The standard mitigation ratios are currently:

- a) Restoration: One (1) acre of restored wetland for one (1) acre credit.
- b) Creation: One and one-half (1.5) acres of created wetland for one (1) acre of credit.
- c) Enhancement: Three (3) acres of enhanced wetland for one (1) acre of credit.
- d) Enhancement of cropped wetland: Two (2) acres of enhanced cropped wetland for one (1) acre of effected wetland.

Preservation of existing wetlands that support a significant population of rare plant or animal species, or that are a rare wetland type (S1 or S2 according to the Oregon Natural Heritage

Program) may be proposed to generate credits. Credits may also be proposed for preservation or improvements of riparian areas, buffers and uplands if the resources in these areas are essential to maintain the ecological viability of a water of the U.S. Credits generated for preservation and buffers will be determined on a case-by-case basis through negotiation between DSL and the Corps in consultation with the IRT.

FIL projects that are eligible for collaborative funding from multiple sources are encouraged under the FIL Program. Credits will be based solely on aquatic resource functions provided as a result of the mitigation plan, over and above those provided by funding programs identified as Public Resource Protection and Restoration Programs, in accordance with Oregon Interagency Recommendations (2008). The Corps, in consultation with the IRT, will determine the amount of mitigation credit available to DSL for collaboratively funded projects, based on the proportion of FIL Program Account disbursements relative to the complete project cost. Credit apportionment may be modified by the Corps and IRT if, after a collaboratively-funded project is completed, an audit indicates that DSL's actual financial contribution was substantially more or less than anticipated.<sup>217</sup>

**The Oregon ILF instrument states that the “cost of each credit will be determined by DSL annually as the average**

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217 Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

cost of credits available from all active mitigation banks in the state,”<sup>218</sup> as dictated by state statute.<sup>219</sup>

### North Carolina Ecosystem Enhancement Program

The North Carolina EEP’s draft instrument includes the following section describing how credits will be generated by the program:

For the purposes of this agreement, re-establishment and rehabilitation, as defined in the Federal Mitigation Rule have been combined under the Restoration category. Additionally, the parties to this agreement agree that creation of aquatic resources should only be undertaken as a last resort.

The number of credits proposed to be generated by each mitigation project, along with the rationale for estimating the credit yield, will be provided in the mitigation plan and will be based on current DE and IRT guidance. Alternatively, credit generation may be based on a functional or condition assessment tool approved by the DE and the IRT on a case-by-case basis.<sup>220</sup>

The North Carolina EEP Draft Instrument states that the credit fees are established pursuant to state law and regulations<sup>221</sup> and that:

NCEEP’s fees for stream and wetlands mitigation are established by an analysis of known, historic and expected costs associated with the restoration, establishment, enhancement, and/or preservation of aquatic resources. All program costs including expenses for land acquisition, project planning and design, construction, plant materials, labor, legal fees, monitoring, remediation or adaptive management activities, and long-term management, as well as administration of the program are accounted for in the establishment of fees. NCEEP will provide in its annual report an analysis of the program’s cost data and determine whether or not a fee adjustment is necessary.<sup>222</sup>

### New Hampshire In-Lieu Fee Program

The New Hampshire in-lieu fee program utilizes the mitigation ratios in Figure 7.<sup>223</sup>

## Sample language

The draft fee schedule section should simply include a chart or list of the fees charged by the program per unit of credit and for each wetland type provided and in each service area in which the program operates.

218 Ibid.

219 ORS 196.643.

220 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

221 N.C.G.S. 143-214.11; 15A NCAC 2R .0402.

222 North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

223 See: New Hampshire Department of Environmental Services. 2009. “Aquatic Resource Mitigation.” Environmental Fact Sheet WD-WB-17. <http://des.nh.gov/organization/commissioner/pip/factsheets/wet/documents/wb-17.pdf>. (Last visited November 2, 2009.)

**Mitigation Ratio Table 800-1**

<b>Resource Type</b>	<b>Creation Ratio (resource created: size of impact)</b>	<b>Restoration Ratio (resource restored: size of impact)</b>	<b>Preservation of Upland Buffer Area (buffer area: size of impact)</b>
Bog	N/A	2:1	15:1
Tidal Wetlands	3:1	2:1	15:1
Forested	1.5:1	1.5:1	10:1
Undeveloped Tidal Buffer Zone	N/A	2:1	3:1
All Other Jurisdictional Areas	1.5:1	1:1	10:1

Figure 7: Mitigation Ratio Table

Fees for (ILF Program) shall be determined based on an analysis of the expected costs associated with the restoration, establishment, enhancement, and/or preservation of aquatic resources in [the state/region/watershed]. The program costs included in this analysis are those related to land acquisition, project planning and design, construction, plant materials, labor, legal fees, monitoring, remediation or adaptive management activities, program administration, contingency costs appropriate to the stage of project planning, including uncertainties in construction and real estate expenses, the resources necessary for the long-term management and protection of the in-lieu fee project, and financial assurances (including contingency costs) that are expected to be necessary to ensure successful completion of in-lieu fee projects. These fees shall be reviewed annually and updated as appropriate.

Credits generated by (ILF Program) shall be based on [an appropriate assessment method or other suitable metric] approved by the Corps. The standard mitigation ratios for wetlands are currently [See Figure 8.]:

### **Service Area X**

	<b>Aquatic resource type #1</b>	<b>Aquatic resource type #2</b>	<b>Aquatic resource type #3</b>
Restoration	Ratio of acre restored per acre of credit (e.g., 2:1)	"	"
Creation	Ratio of acre created per acre of credit (e.g., 5:1)	"	"
Enhancement	Ratio of acre enhanced per acre of credit (e.g., 5:1)	"	"
Preservation	Ratio of acre preserved per acre of credit (e.g., 10:1)	"	"

Figure 8: Service Area X

The standard mitigation ratios for streams are currently:

[Insert chart as appropriate.]



## 9. In-Lieu Fee Program Account

- “A complete prospectus includes...A description of the in-lieu fee program account...” (§332.8(d)(2)(viii)(B))
- “For an in-lieu fee program, a complete draft instrument must include... A description of the in-lieu fee program account...” (§332.8(d)(6)(iv)(D))

### Background and definitions

The section of the instrument regarding the program account is first included in the prospectus<sup>224</sup> and then again in the draft instrument.<sup>225</sup> As a result, the program sponsor has the opportunity to consider public feedback and comments, as well as two rounds of review from the IRT before finalizing the program account in the final instrument.

The in-lieu fee prospectus, draft instrument, and final instrument must describe the in-lieu fee program account. Language requiring *establishment* of the program account is provided in Section 2. This section, on the other hand, must *describe how the program account operates*. The in-lieu fee program account is an account established by the program sponsor to track the fees accepted and disbursed. The account must track funds accepted from permittees separately from those accepted from other entities and for other purposes (i.e., fees arising out of an enforcement action, “such as supplemental environmental projects,” donations, and grants.)<sup>226</sup>

The account must be established after the instrument is approved and before any fees are accepted. It must be held at a “financial institution that is a member of the Federal Deposit Insurance Corporation.” Any interest accruing from the account must remain in the account for the program to use “for the purposes of providing compensatory mitigation.”<sup>227</sup> Prior to the 2008 rule, the vast majority of in-lieu fee programs retained their funds in a designated trust fund, restricted account, or account separate from other funds of the sponsoring organization or agency. Many of the instruments for these programs stipulated that the fund was retained in an institution that was a member of the Federal Deposit Insurance Corporation and the vast majority stated that the interest earned by the accounts would remain with the fund to fulfill the purposes of the program.<sup>228</sup>

The instrument must also state that if the Corps determines that the in-lieu fee sponsor is failing to provide compensatory mitigation by the third full growing season after the first advance credit is secured (as discussed in §332.8(n)(4)), the agency may direct the funds “to alternative compensatory mitigation

224 Compensatory Mitigation Rule (2008), §332.8(d)(2)(viii)(B).

225 Ibid., §332.8(d)(6)(iv)(D).

226 Ibid., §230.93(g).

227 Ibid., §332.8(i)(1).

228 ELI (2006), p. 31.

projects...”<sup>229</sup> The district engineer, in consultation with the IRT, determines the entity or entity to whom the funds will be directed. These could include one or more mitigation bankers, in-lieu fee providers or other mitigation providers. Additional information on failure to fulfill the terms of the instrument are discussed in Section 4, “Default & Closure”. Finally, the Corps has the authority to audit the program account records at any time.<sup>230</sup>

## How funds can be used

The 2008 rule now requires that the funds can only be used specifically for “selection, design, acquisition, implementation, and management of in-lieu fee compensatory mitigation projects...”<sup>231</sup> Slightly fewer than half of the pre-2008 in-lieu fee program instruments stipulated that the funds collected could only be used for the direct replacement of aquatic resource functions and values.<sup>232</sup> Although more specific than past guidance on in-lieu fee mitigation, the rule does leave some uncertainties with regard to how funds can be used. In-lieu fee sponsors should consider specifically stating that fees can be used only for the purposes of directly replacing and managing aquatic resources and should further define the term as: identification and selection of appropriate compensation sites, design of mitigation projects,

acquisition-related costs (e.g., appraisals, surveys, title insurance, etc.), fees associated with securing a permit for conducting mitigation activities, activities related to the restoration, enhancement, creation, and/or preservation of aquatic resources, maintenance and monitoring of mitigation sites, and the purchase of credits from mitigation banks. In-lieu fee instruments should also discuss uses for which funds are explicitly prohibited, such as upland preservation (other than buffers), research, education and outreach, or implementation of best management practices for wetlands.<sup>233</sup>

## Administrative costs

The rule does allow “a small percentage” of the fund to be used for administrative costs and gives the Corps the discretion to determine the appropriate amount.<sup>234</sup> The majority of pre-2008 instruments allowed the sponsoring agency or organization to use some portion of the funds collected for program administration, and almost all of these placed an upper limit or percentage limit on how much of the fund could be used for administrative expenses. Percentage limits ranged from 2 percent to 15 percent, averaged 6.8 percent, and the mean was 5 percent. When funds were used for administrative purposes, the agreements often further specified those uses.

In its 2006 report on in-lieu fee mitigation, ELI suggested that instruments further dictate not only a percentage or

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229 Compensatory Mitigation Rule (2008), §332.8(i)(2).

230 *Ibid.*, §332.8(i)(4).

231 *Ibid.*, §332.8(i)(1).

232 ELI (2006), pp. 38-39.

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233 ELI (2006), p. 38.

234 Compensatory Mitigation Rule (2008), §332.8(i)(1).

amount cap, but specifically define what activities and expenditures constitute administrative costs. For example, agreements might state that administrative costs may include bank charges associated with the establishment and operation of the program, staff time for carrying out program responsibilities, expenses for day to day management of the program, such as bookkeeping, mailing expenses, printing, office supplies, computer hardware or software, training, travel, and hiring private contractors or consultants.

## Examples of in-lieu fee program accounts

**Oregon Statewide Fee-in-Lieu Instrument**  
The Oregon Statewide Fee-in-Lieu Instrument describes the Program Account as follows:

The Wetland Mitigation Bank Revolving Fund (WMBRF<sup>235</sup>) is an Oregon statutory account that collects fees in lieu of mitigation (deposits) and expends the funds on wetland restoration (wetland grants). The WMBRF may not be used for purposes other than those outlined by statute (Exhibit C) and is maintained as a separate account from DSL's general operating budget.

Upon Corps approval of the FIL program, DSL will create a separate FIL Program Account within the WMBRF. The Program Account will collect deposits from the sale of credits, and will be used only for the selection, design, acquisition, implementation,

monitoring, management and protection of FIL projects, and administrative costs for DSL. Administrative costs, not to exceed 15% of the Program Account, are allowed for DSL to manage the FIL Program.

All interest and earnings from the Program Account will remain in that account for the purpose of providing compensatory mitigation for impacts to Waters of the U.S. Initially, funds for the FIL Program wetland grants may be borrowed from existing WMBRF monies and repaid as credits are sold.

Complete budgets for FIL projects will be approved as part of mitigation plans. Annual accounting reports will be presented by December 1 for approval by the Corps. Reports will include detailed summaries of Program Account deposits and disbursements for each FIL project made over the previous State fiscal year (July 1 – June 30) (Section VIII). Any deviation in excess of ten percent from the approved budget will require Corps approval before additional funds are disbursed. The Corps may review Program Account records with 14 days written notice. When so requested, DSL shall provide all books, accounts, reports, files, and other records relating to the Program Account.<sup>235</sup>

**The rules for how the funds from the Oregon Statewide Fee-in-Lieu program may be used are dictated by the state law that established the Oregon Wetlands Mitiga-**

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<sup>235</sup> Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

**tion Bank Revolving Fund Account.**<sup>236</sup>

The statute states the monies in the fund may only be used:

(1) For the voluntary acquisition of land suitable for use in mitigation banks. (2) *To pay for specific projects to create, restore or enhance wetland areas* for purposes of carrying out the provisions of [the state's banking and in-lieu fee provisions].<sup>237</sup> *Moneys deposited in the account for wetland impacts may be used only for wetland creation, restoration and enhancement.* (3) For purchase of credits from approved mitigation banks. (4) *For payment of administrative, research or scientific monitoring expenses of the department* in carrying out the provisions of [the wetlands provisions.]

**Virginia Aquatic Resources Trust Fund**

The Nature Conservancy's Virginia Chapter has been sponsoring an in-lieu fee program since 1995. Its 2003 amendment states that "the Conservancy shall receive an overhead fee amounting to 3% of the funds when the funds are deposited. The fee will come from the funds and is deemed to represent and reimburse reasonable overhead and related administrative costs of administering the Trust to accomplish the mitigation projects described herein."<sup>238</sup>

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236 ORS.196.640 et seq.

237 Emphasis added. ORS 196.600 to 196.905 cover both the state's banking and in-lieu fee mitigation programs.

238 The Nature Conservancy. December 18, 2003. Amendment to Memorandum of Understanding Between The Nature Conservancy and the U.S. Army Corps Of Engineers. Virginia Aquatic Resources Trust Fund, Virginia.

**Kentucky In-Lieu-Fee Program for Stream and Wetland Mitigation**

The instrument for Kentucky Department of Fish and Wildlife Resources' In-Lieu-Fee Program for Stream and Wetland Mitigation provides an example for how administrative costs may be handled:

[The Agency] may incur reasonable administrative costs associated with this in lieu fee program. These costs will be deducted from the Fund. Monies available for administrative costs shall be equal to 5% of each contribution to the Fund plus 5% of any interest accruing on the Fund. A separate project account shall be established to record revenue and expenditures for administrative costs. General administrative costs incurred by the [Kentucky Department of Fish and Wildlife Resources] include, but may not be limited to the following: annual report preparation; initial field visit to investigate potential projects; the annual field day for on-going and/or completed projects; development of an initial scope of services to be presented to the Corps for approval of individual projects (after which a detailed scope of services will be prepared as a direct project cost); development of general language for conservation easements; non-project related meetings with the Corps; other non-project specific administrative functions.<sup>239</sup>

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239 Kentucky Department of Fish and Wildlife Resources, In-Lieu-Fee Program for Stream and Wetland Mitigation, Kentucky (2003).

**Tennessee Statewide In-Lieu-Fee Program**

The Tennessee Department of Environment and Conservation submitted a prospectus for a statewide in-lieu fee program in June 2009. The prospectus states that “The program account will be used only for the selection, design, acquisition, implementation, monitoring and management of in-lieu-fee compensatory mitigation projects except for a small percentage (to be determined by the instrument) that can be used for administrative costs.”<sup>240</sup>

**New Hampshire In-Lieu Fee Program**

The state statute establishing the New Hampshire in-lieu fee program states:

- I. There is hereby established the aquatic resource compensatory mitigation fund into which payments made under this subdivision shall be deposited. The fund shall be a separate, non-lapsing fund continually appropriated to the department to be used only as specified in this subdivision for costs related to wetlands creation or restoration, stream restoration, preservation of upland areas adjacent to wetlands, and the subsequent monitoring and maintenance of such areas.
- II. The fund may not be used to pay state personnel costs except, upon approval of the fiscal committee, to support up to one full-time position for administration of the fund and related projects. Only money from the 5 percent administrative assessment collected

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240 Tennessee Department of Environment and Conservation. June 2009. Prospectus for a Statewide In-Lieu-Fee Program p. 21.

under RSA 482-A:30, III shall be used for this purpose.

- III. The state treasurer shall invest the fund as provided by law. Interest received on such investment shall be credited to the fund.
- IV. The wetlands council, established by RSA 21-0:5-a, shall approve disbursements of the aquatic resource compensatory mitigation fund based on recommendations provided by the site selection committee established under RSA 482-A:32, and in accordance with rules adopted by the commissioner.<sup>241</sup>

**Montana Wetlands Legacy Trust Fund**

The 2004 instrument for the Montana Wetlands Legacy Trust Fund stipulated how funds from the program account could be used:

Funds shall be used solely 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.<sup>242</sup>

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241 RSA 482-A:29.

242 Montana Department of Fish, Wildlife and Parks, Montana Wetlands Legacy Trust Fund, Montana (2004).

### Ventura River Watershed Habitat Restoration Fund In-Lieu Fee Mitigation Program

See Figure 9 for a ledger report for the Ventura River Watershed Habitat Restoration Fund In-lieu Fee Mitigation Program, sponsored by the Ojai Valley Land Conservancy from 2006.<sup>243</sup>

## Sample language

Note: Language requiring *establishment* of the program account is provided in Section 2. This section, on the other hand, must *describe* how the program account operates.

### *Financial accounting*

Reporting requirements for financial reporting are at Section (X, "Reporting Protocol.") The (ILF Program) account will track funds accepted from permittees separately from those accepted from other entities and for other purposes (i.e., fees arising out of an enforcement action, such as supplemental environmental projects). The account will be held at a financial institution that is a member of the Federal Deposit Insurance Corporation. Any and all interest accruing from the account will be used to provide compensatory mitigation for impacts to aquatic resources.

The program account will be established after this instrument is approved and before any fees are accepted. If the Corps

243 U.S. Army Corps of Engineers, Los Angeles District. "Mitigation Banks, In-Lieu Fee Programs, and Performance Bonds in the Los Angeles District." <http://www.spl.usace.army.mil/regulatory/mitig/mitig.html>. (Last visited October 30, 2009.)

determines that the (Program Sponsor) is failing to provide compensatory mitigation by the third full growing season after the first advance credit is secured, the agency may direct the funds to alternative compensatory mitigation projects. Additional information on failure to fulfill the terms of the instrument is discussed in Section (X, "Default & Closure"). The Corps has the authority to audit the program account records at any time.

Funds paid into the (ILF Program) account may only be used for the direct replacement and management of aquatic resources. This means the selection, design, acquisition (i.e., appraisals, surveys, title insurance, etc.), implementation, and management of in-lieu fee compensatory mitigation projects. This may include fees associated with securing a permit for conducting mitigation activities, activities related to the restoration, enhancement, creation, and/or preservation of aquatic resources, maintenance and monitoring of mitigation sites, and the purchase of credits from mitigation banks. Use of fees is explicitly prohibited for activities such as upland preservation (other than buffers), research, education and outreach, or implementation of best management practices for wetlands.

Up to (%) of the fees paid into (ILF Program) may be used for administrative costs. Such costs include bank charges associated with the establishment and operation of the program, staff time for carrying out program responsibilities, expenses for day to day management of the program, such as bookkeeping,

mailing expenses, printing, office supplies, computer hardware or software, training, travel, and hiring private contractors or consultants.

*Credit accounting*

(Program Sponsor) shall establish and maintain an annual report ledger that tracks the production of released credits for (ILF Program) and for each individual in-lieu fee project. Reporting requirements for the annual report ledger are at Section (X).

On the income side, (Program Sponsor) shall track the fees and all other income received, the source of the income (i.e., permitted impact, penalty fee, etc.), and any interest earned by the program account. The ledgers shall also include a list of all the permits for which in-lieu fee program funds were accepted, including the appropriate permit number (Corps or state permit), the service area in which the specific authorized impacts are located, the amount (acreage or linear feet) of authorized impacts, the aquatic resource type impacted by Cowardin class, the amount of compensatory mitigation required, the amount paid to the in-lieu fee program for each of the authorized impacts, and the date the funds were received from the permittee.

(Program Sponsor) shall establish and maintain a report ledger for (ILF Program) that will track all program disbursements/expenditures and the nature of the disbursement (i.e., costs of land acquisition, planning, construction, monitoring, maintenance, contingencies, adaptive management, and

administration). (Program Sponsor) may also track funds obligated or committed, but not yet disbursed.

The ledger shall also include, for each project, the permit numbers for which the project is being used to offset compensatory mitigation requirements, the service area in which the project is located, the amount of compensation being provided by method (i.e., restoration, establishment, enhancement, or preservation), the aquatic resource type(s) represented (e.g., Cowardin class), the amount of compensatory mitigation being provided (acres and/or linear feet), and the number of credits certified by the IRT.

The annual report ledger shall also include a balance of advance credits and released credits at the end of the report period for each service area.

Corps File #	Project requiring mitigation	Location of Impact	Acre Impact	Acre Mitig. Req'd	Fee Amount	When Funds Rec'd	Corps Approval Ltr. Date	When Funds Expended
200301424-JWM	Southern California Gas Company	Hall Canyon Creek	0.003	0.062	\$4,340	Oct-03		Fall 2005-Spring 2010
200301424-JWM	Southern California Gas Company	Hall Canyon Creek	0.002	0.044	\$3,080	Jan-04		"
9850325-LM	Live Oak Creek Diversion Project	Live Oak Creek	0.285	0.57	\$39,900	Sep-99		"
9850325-SDM	Live Oak Creek Diversion Project	Live Oak Creek	0.285	0.58	\$40,600	Sep-99		"
200000330-SDM	Caltrans Project	Willow Creek	0.14	0.28	\$21,000	Dec-01		"
200200668-JWM	Lisheski Housing Project	Oak View	0.014	0.07	\$4,900	Jun-02		"
199916369-PMG	Crooked Palm-Caltrans	Ventura	0.0075	0.2	\$14,000	Dec-99		"
2002001056-JWM	Bear Creek-Exon Housing	Summit	0.017	0.017	\$490	Oct-02		"
200501858-KW	Caltrans Interchange	Seward Ave-Ventura	0.27	0.27	\$18,900	May-02		"
200301637-JWM	Rancho Dos Rios	San Antonio Creek	0.1695	0.095	\$7,125	Oct-04		"
200301392-AJS	Ventura Port District Harbor Village Marina Rehabilitation Project	Ventura Harbor	0.05	0.05	\$3,511	Nov-05		"
200201193-SAD	Caltrans Drainage Overflow Culvert Project	Lake Casitas/HWY 150	0.01	0.35	\$43,750	Apr-06		"
					\$201,569			

Figure 9: Ledger report (Ventura River Watershed Habitat Restoration Fund In-Lieu Fee Mitigation Program)





## 10. Transfer of Long-Term Management Responsibilities

- In the case of in-lieu fee programs, “The legal mechanisms and the party responsible for the long-term management and the protection of the [site] must be documented [in] the approved mitigation plans.” (§332.8(u)(1))
- “The instrument may contain provision for the sponsor to transfer long-term management responsibilities to a land stewardship entity, such as a public agency, non-governmental organization, or private land manager.” (§332.8(u)(2))

### Background and definitions

Section 332.7(d) of the rule includes a full description of the long-term management requirements that apply to all forms of compensatory mitigation, including in-lieu fee programs. Section §332.8(u), on the other hand, provides long-term management requirements that are specific to in-lieu fee programs.

There are several different aspects of long-term management of mitigation sites, such as the long-term site protection instrument, the long-term management activities themselves, the party responsible for long-term management, the mechanism(s) for financing long-term management activities, and if and how the responsibility and funding for long-term management will be transferred to another entity. Because of the unique nature of in-lieu fee programs, however, some components of long-term management are found in the instrument establishing the program, while others are found in the project-specific in-lieu fee mitigation plan. This section of the instrument, however, must indicate the entity to which the project will be transferred, how the long-term management activities will be financed, and the timing

of the transfer of long-term management funds to the long-term project steward.<sup>244</sup> Element 9 of the compensation planning framework (see Section 6, “Compensation Planning Framework”), on the other hand, requires the sponsor to describe “the long term protection and management strategies for activities conducted by the in-lieu fee program sponsor.”<sup>245</sup>

Long-term stewardship and management of in-lieu fee project sites can take many different shapes. In some cases, the in-lieu fee sponsor is a government agency or non-profit conservation organization with land conservation as a mission and the sponsor fully intends to retain ownership and management responsibilities for project sites. In other cases, the in-lieu fee sponsor may intend to transfer the project sites to another entity for ownership or long-term management. In these cases, mitigation project sponsors may have difficulty securing a long-term steward until after the project is further along and the risks are clearer (i.e., the site is completed and meeting performance standards). As a result, the in-lieu fee instrument and project-specific mitigation plan(s) generally identify the

<sup>244</sup> Compensatory Mitigation Rule (2008), §332.8(u)(3).

<sup>245</sup> *Ibid.*, §332.8(c)(2)(ix).

sponsor as the long-term steward (the “default” long-term steward). Long-term management and funding then can be transferred to another party with the approval of the district engineer and IRT at some later point. This, presumably, holds true for the portion of the long-term management plan that describes long-term management needs (e.g., annual cost estimates for these needs) and how those needs will be financed.<sup>246</sup> For more on long term management financing, see Section 5, “Reporting Protocols,” and Section 11, “Financial arrangements for long-term management.”

If the sponsor does transfer the long-term management responsibilities to another entity, the rule allows these properties to be transferred to “a land stewardship entity, such as a public agency, non-governmental organization, or private land manager...”<sup>247</sup> If the project sponsor plans to transfer the long-term stewardship to such an entity at any stage in the process, such a transfer must be approved by the district engineer.<sup>248</sup>

## Examples of long-term management provisions

### North Carolina Ecosystem Enhancement Program

The draft instrument for North Carolina’s Ecosystem Enhancement Program states:

<sup>246</sup>Ibid., §§332.7(d)(2) and 332.8(u)(1).

<sup>247</sup>Ibid., §332.7(d)(1).

<sup>248</sup>Ibid.

NCEEP will transfer responsibility for the long-term management of mitigation sites to the NCDENR Stewardship Program, or other entity, as approved by the IRT and DE. In addition, NCEEP may transfer ownership or management responsibilities of mitigation site properties on a case-by-case basis to appropriate non-profit conservation organizations, state or local government entities, or land trusts for management and monitoring, with approval by the IRT and DE. NCEEP is responsible for ensuring that the preservation mechanism is re-recorded to ensure that NCEEP remains within the chain of title. The terms and conditions of this conveyance shall not conflict with the intent and provisions of the preservation mechanism nor shall such conveyance enlarge or modify the uses specified in the preservation mechanism.<sup>249</sup>

### Oregon Statewide Fee-in-Lieu Program

The final instrument for the Oregon Statewide Fee-in-Lieu Instrument states:

Where permanent legal property protection instruments are appropriate, conservation easements will be held by entities such as Federal, Tribal, other State or local resource agencies, or non-profit conservation organizations. The protection mechanism shall assign long-term stewardship roles and responsibility for the project and will, to the extent practicable, prohibit incompatible uses that might otherwise jeopardize the objectives of the FIL project.

<sup>249</sup>North Carolina Department of Environment and Natural Resources. Ecosystem Enhancement Program In-Lieu Fee Instrument. Draft. December 16, 2009.

Copies of such recorded instruments shall be sent to the Corps and become part of the official project record. Each protection instrument shall contain a provision requiring notification to DSL and the District Engineer if any action is taken to void or modify it.<sup>250</sup>

## Sample language

After securing approval from the district engineer, (Program Sponsor) shall transfer long-term management responsibilities to [name a specific land stewardship entity or “a land stewardship entity, such as a public agency, non-governmental organization, or private land manager”]. Transfer of long term stewardship responsibilities shall not occur until after performance standards have been achieved. Once long term management has been transferred to land stewardship entity, said party is thereby responsible for meeting any and all long-term management responsibilities outlined in the project-specific mitigation plan. Until such time as long-term management responsibilities are transferred to another party, (Program Sponsor) will be considered responsible for long-term management of the mitigation project.

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250 Oregon Department of State Lands. Oregon Statewide Fee-in-Lieu Instrument. July 10, 2008.

## 11. Financial Arrangements for Long-Term Management

- “The instrument or approved mitigation plan must address the financial arrangements and timing of any necessary transfer of long-term management funds to the steward.” (§332.8(u)(3))

### Background and definitions

Section 332.7(d) of the rule includes a full description of the long-term management requirements that apply to all forms of compensatory mitigation. The requirement to include information on financial arrangements and timing of transfer of long-term management funds is not included in the section of the rule that lists the ten required elements of the draft instrument (§§332.8(d)(6)(ii) and 332.8(d)(6)(iv)). Rather this requirement appears in a general section on long-term management for banks and in-lieu fee programs (§332.8(u)(3)).

As noted above in Section 5 (“Reporting protocols”), long-term management funds are those funds or accounts that are set aside to ensure that monies will be available to support the annual long-term management needs of the compensatory mitigation project(s).

Element 9 of the compensation planning framework (see Section 6, “Compensation Planning Framework”) requires the sponsor to describe “the long term protection and management strategies for activities conducted by the in-lieu fee program sponsor.” This section of the instrument, however, deals with the procedures for transferring the financing to support those responsibilities. The rule

is not explicit, however, about whether or not the long-term steward legally responsible for long-term management. If that is the intent of the parties involved (i.e., in-lieu fee sponsor, long-term steward, and regulatory agency), it should not be in the program sponsor’s sole discretion to transfer the long-term management responsibilities. Rather, the in-lieu fee instrument should require the Corps’ approval before the long-term responsibility is transferred. Indeed, it would be best from the government’s perspective if it were a signatory to the contract assigning the rights and delegating the responsibilities to the steward.<sup>251</sup>

If the in-lieu fee sponsor chooses to and the Corps approves the transfer mitigation lands and their associated management responsibilities to a long-term land steward, the financial arrangements set aside for these duties must be transferred as well. As with identification of the long-term steward, provisions for the timing and transfer of long-term management funds to the long-term steward may be included in either the instrument or the approved mitigation plan.<sup>252</sup> However, §332.7(d)(3) states that the provisions for long-term financing “must be addressed in the...instrument.”

251 Gardner, Roy. December 9, 2009. Personal communication.

252 Compensatory Mitigation Rule (2008), §332.8(u)(3).

## Examples of financial arrangements for long-term management

In its prospectus, The Ocean Foundation outlines not only the transfer of long-term management responsibilities, but transfer of long-term management funds as such:

The Ocean Foundation will provide for long-term management, and at the end of the active monitoring period, the Sponsor shall transfer the long-term management responsibility and access to funding to a third party perpetuity contractor to be identified. At that time, the third party perpetuity contractor shall retain responsibility for management of the restoration area in perpetuity in accordance with the terms of the long-term management plans and real estate provisions. Upon signing of the Final Instrument the long-term management entity concurs and it shall use the long-term management funds to be used for this purpose only.<sup>253</sup>

## Sample language

If (Program Sponsor) chooses to transfer the responsibilities for long-term management to a long-term steward, (Program Sponsor) must seek Corps' approval. The Corps must be given the option of being a signatory to any contract or other arrangement assigning the

rights and delegating the responsibilities to the steward.

If long-term stewardship responsibilities are transferred to (land stewardship entity), (Program Sponsor) shall also transfer the long-term management funds/account for otherwise arrange for disbursements from such funds/account to the (land stewardship entity).

<sup>253</sup>The Ocean Foundation. October 2009. "Aquatic Resource Fund In-Lieu-Fee Prospectus."

## 12. Signatures

### Background

The final instrument must be signed by the program sponsor and the district engineer, at a minimum, before the program can be used to provide compensatory mitigation for permits.<sup>254</sup> The other members of the IRT may choose to sign the instrument as an indication

of their agreement with the terms of the instrument.<sup>255</sup> Alternatively, IRT members may submit a letter expressing concurrence with the instrument.<sup>256</sup> The instrument is approved at the date that it is signed by both the Corps and the program sponsor, whichever comes later.

### Sample language

Signatures:

\_\_\_\_\_  
Program sponsor

\_\_\_\_\_  
Date

\_\_\_\_\_  
District Engineer

\_\_\_\_\_  
Date

\_\_\_\_\_  
IRT members choosing to participate

\_\_\_\_\_  
Date

<sup>254</sup> Compensatory Mitigation Rule (2008), §332.8(a)(1).

<sup>255</sup> Ibid., §332.8(b)(3).

<sup>256</sup> Ibid.

# Appendices



# Appendix A

## Compensation Planning Framework Resources

### CONTENTS

#### **At-risk species/habitat**

#### **Development Trends**

- Population trends
- Transportation and infrastructure
- Energy development

#### **Flood risk**

#### **Mapping data**

#### **Status and trends in habitat and land use**

#### **Surface water**

#### **Water quality**

#### **Other tools**

- NatureServe Vista

Note: Additional resources to support the compensation planning framework are expected to be available through the Environmental Law Institute in early 2010 as part of ELI and The Nature Conservancy's joint Pilot Watershed Approach Project. Funding for that effort was provided by the Doris Duke Charitable Foundation.

## At-risk species/habitat

- State wildlife action plans: Congress created the State Wildlife Grants Program in 2000.<sup>257</sup> In order to be eligible for these new funds, the states were each required to prepare a State Wildlife Action Plan (the original term was “comprehensive wildlife conservation strategy”), a comprehensive plan addressing eight required elements. The plans, which were developed by all 50 states and 6 territories, were all submitted by October 2005. The required elements include: Information on the distribution and abundance of species of wildlife; Descriptions of extent and condition of habitats and community types essential to conservation of species; Descriptions of problems which may adversely affect species or their habitats.<sup>258</sup> Approximately 31 State Wildlife Action Plans also include spatially explicit maps delineating the location of terrestrial, and in some cases aquatic, conservation opportunity areas.<sup>259</sup> Links to each of the state wildlife action plans are at: <http://www.wildlifeactionplans.org/>
- State natural heritage programs: Each state maintains a biological inventory called a natural heritage program or conservation data center.

257 16 U.S.C. § 669c.

258 See: Association of Fish and Wildlife Agencies, *State Wildlife Action Plans: Eight Required Elements*, [http://www.wildlifeactionplan.org/pdfs/eight\\_elements\\_handout.pdf](http://www.wildlifeactionplan.org/pdfs/eight_elements_handout.pdf) (listing eight elements required by Congress).

259 Lerner, Jeff. January 2009. “Identified Conservation Opportunity Areas for the Lower 48 States.” Unpublished map.

These programs are often housed within state natural resource agencies, wildlife agencies, or universities. Heritage programs collect and manage detailed local information on plants, animals, and ecosystems. They and their national affiliate, NatureServe, also develop information products, data management tools, and conservation services to help meet local, national, and global conservation needs. Links to each of the state programs are at: <http://www.natureserve.org/visitLocal/SpecialAreaManagementPlans>

- (CZMA): Under the Coastal Zone Management Act of 1972 coastal states develop Coastal Zone Management Plans that must identify critical coastal resources and suggest ways of protecting those resources. The Coastal Zone Enhancement Program of 1990, part of CZMA, now requires coastal states to conduct an assessment of their coastal management activities in nine areas.<sup>260</sup> These assessments must be carried out every five years.<sup>261</sup> Many of the coastal states have also adopted Special Area Management Plans to address

260 The nine “coastal zone enhancement areas” are: wetlands, coastal hazards, public access, marine debris, cumulative and secondary impacts, special area management plans, ocean/Great Lakes resources, energy and government facility siting, and aquaculture.

261 For more on the Coastal Zone Enhancement Program, see: NOAA. “Coastal Zone Enhancement Program.” <http://coastalmanagement.noaa.gov/enhanc.html>. (Last visited April 15, 2009.)

particular conservation needs within their coastal zones.<sup>262</sup>

- **State Forestry Plans/Forest Legacy (Farm Bill):** The 2008 Farm Bill added a new section to the Cooperative Forestry Assistance Act of 1978, requiring state foresters to develop a statewide assessment of forest resource conditions and a long-term statewide forest resource strategy. The State Forestry Plans are used for a variety of conservation purposes, including coordination with the previously existing Forest Legacy Program. Under Forest Legacy, for states to be eligible for funding for the purchase of conservation easements on forest lands, they must develop and receive US Forest Service approval of an assessment of need, which identifies, maps, and describes forest lands that are deemed important and in need of protection from conversion to non-forest uses.<sup>263</sup> The US Forest Service “shall give priority to lands which can be effectively protected and managed, and which have important scenic or recreational values; riparian areas; fish and wildlife values, including threatened and endangered species; or other ecological values.”<sup>264</sup>
- **[Endangered Species Recovery Plans \(ESA\)](#):** One of the central goals of the federal Endangered Species Act is the recovery of threatened and endangered species and the ecosys-

tems on which they depend.<sup>265</sup> Once a species is listed by the U.S. Fish and Wildlife Service or National Oceanic and Atmospheric Administration, the agencies must “develop and implement a recovery plan” that includes 1) “a description of such site-specific management actions” that will support “conservation and survival of the species”; and 2) “objective, measurable criteria” that will support species recovery.<sup>266</sup> Recovery plans go out to public comment and after they are finalized, the plans guide habitat protection and restoration.<sup>267</sup> Recovery plans are also centrally available on a U.S. Fish and Wildlife Service web site.<sup>268</sup>

- **[Waterfowl Management Plans](#)** (North American Wetlands Conservation Act): Authorized by the North American Wetlands Conservation Act of 1986,<sup>269</sup> the North American Waterfowl Management Plan relies upon partnerships to implement migratory bird conservation. The partnerships are called “joint ventures,” which include a broad cross section of government at all levels, conservation organizations, and citizens. Joint

265 U.S. Fish and Wildlife Service, Sacramento Fish & Wildlife Office. “Recovery Planning.” <http://www.fws.gov/sacramento/es/recovery.htm>. (Last visited June 11, 2009.)

266 16 U.S.C. § 1533(f)(1)(B).

267 U.S. Fish and Wildlife Service, Sacramento Fish & Wildlife Office. “Recovery Planning.” <http://www.fws.gov/sacramento/es/recovery.htm>. (Last visited June 11, 2009.)

268 U.S. Fish and Wildlife Service. “Species reports.” [http://ecos.fws.gov/tess\\_public/SpeciesRecovery.do?sort=1](http://ecos.fws.gov/tess_public/SpeciesRecovery.do?sort=1). (Last visited June 11, 2009.)

269 16 U.S.C. § 64 (2006).

262 16 U.S.C. §§ 1453(17), 1455 (2006).

263 16 U.S.C. § 2103c (2006).

264 *Id.* § 2103c(e).

ventures develop implementation plans, guided by biologically based planning, focused on areas of concern identified in the Plan. There are currently 13 joint ventures in the United States.<sup>270</sup>

- [Essential Fish Habitat](#) (NOAA NMFS): NOAA Fisheries, regional Fishery Management Councils, and Federal and state agencies work together to address these threats by identifying Essential Fish Habitat (EFH) for each federally managed fish species and developing conservation measures to protect and enhance these habitats. NMFS may also designate [Habitat Areas of Particular Concern](#), discrete subsets of EFH that provide extremely important ecological functions or are especially vulnerable to degradation. The agency provides extensive information on these habitat areas, as well as GIS data layers.
- [Ecoregional Plans](#) (TNC): To guide its conservation activities, the Nature Conservancy employs ecoregional planning – a comprehensive process for identifying a set of places or areas that, together, represent the majority of species, natural communities, and ecological systems found within a particular eco-region. The plans identify areas that are important to plants, animals, or biological communities and when conserved support the protection of all representative biodiversity.
- National Audubon Society's [Important Bird Area Program](#): The Important Bird Areas Program (IBA) is a global effort to identify and conserve areas that are vital to birds and other biodiversity. IBAs are sites that provide essential habitat for one or more species of bird. IBAs include sites for breeding, wintering, and/or migrating birds. IBAs may be a few acres or thousands of acres, but usually they are discrete sites that stand out from the surrounding landscape. IBAs may include public or private lands, or both, and they may be protected or unprotected. Contact information for the program and each state's contact are listed on Audubon's web site at: [http://www.audubon.org/bird/iba/state\\_coords.html](http://www.audubon.org/bird/iba/state_coords.html)
- State endangered species lists: In addition to the federal Endangered Species Act, many states have similar provisions that lend protection to species that are imperiled more locally. Although these provisions vary from state to state, every state with its own act generally requires or authorizes preparation of a state endangered species list. Links to all of the state wildlife agencies, which generally provide their lists on-line, can be found through the [Association of Fish and Wildlife Agencies](#).

## Development Trends

- *Transportation and infrastructure* Information on anticipated transportation and infrastructure development, which brings growth along with it, is available through state

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270 Ducks Unlimited. "North American Waterfowl Management Plan." <http://www.ducks.org/Conservation/GovernmentAffairs/1623/NAWMP.html>. (Last visited April 15, 2009.)

departments of transportation (DOT) and metropolitan planning organizations (MPO). The state transportation agency generally plays the lead role in developing transportation plans for areas with less than 50,000 residents. MPOs are generally responsible for carrying out these obligations in areas with greater than 50,000 residents. To find links to your state department of transportation see: <http://www.fhwa.dot.gov/webstate.htm>. To identify MPOs in your area, see the website of your state DOT or the Association of Metropolitan Planning Organizations at <http://www.ampo.org/>. Particularly valuable information may be available in:

- o Long-Range Transportation Plans (LRTP): A multi-year transportation plan developed by state DOTs and MPOs in collaboration with a range of stakeholders that defines a vision for the region's or state's transportation systems and services. For metropolitan areas, it includes all transportation improvements proposed for funding over the next 20 years.<sup>271</sup>
- o Transportation Improvement Programs (TIP): Documents prepared by metropolitan planning organizations that lists projects to be funded federal transportation funds over a four- or five-year period.<sup>272</sup>

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271 Surface Transportation Policy Partnership. 2006. "From the Margins to the Mainstream: A Guide to Transportation Opportunities in Your Community." Washington, DC: STPP.

272 Ibid.

- *Energy development*

Each state has a public utility commission (PUC) or public service commission that oversees the functions of the private, investor-owned utilities (the Federal Energy Regulatory Commission is the federal analog). These entities set utility rates, undertake long-term planning, site and permit facilities, and oversee the reliability of provider services. Several resources, likely available through each state PUC, can provide information on future energy development and threats to aquatic resources. Links to each state's regulatory utility commission can be found at: <http://www.naruc.org/commissions.cfm>.

- o Long-term planning resources: In the southeast and west, many utilities have developed statewide integrated resource plans with the involvement of their PUCs. Other states undertake other versions of long-range planning.
- o Rate setting: The process of setting rates for utilities includes analyzing load growth and developing long-term proposals for how to meet future growth.
- o Reliability plans and resource adequacy plans
- o Each state also has a state department of energy, which is part of the administrative branch of state government (the U.S. Department of Energy is federal analog). These agencies work on a wide range of programs and undertake planning as well. Links to each state's regulatory utility commission can

be found at: <http://www.naseo.org/members/states/default.aspx>

## Flood risk

- The U.S. Geological Survey (USGS) collects daily and real-time surface-water data from close to 34,000 stations. Other data available include statistical information, peak-flow data, and field measurements. See: [USGS Surface-Water Data](#).
- The Federal Emergency Management Agency maintains extensive data and maps on flood hazards. These can be found at: <http://www.fema.gov/plan/prevent/fhm/index.shtm>

## Mapping data

- [The National Map](#) is a collaborative effort among the USGS and other Federal, State, and local partners to improve and deliver topographic information for the Nation. It is easily accessible for display on the Web, as products and services, and as downloadable data. The National Map offers a wide variety of geographic information, discussed below. Other types of geographic information can be added within the viewer or brought in with The National Map data into a Geographic Information System to create specific types of maps or map views.
  - o Orthoimagery: High resolution aerial images that combine the visual attributes of an aerial photograph with the spatial accuracy and reliability of a planimetric map.
  - o Elevation: The National Elevation Dataset (NED) is a seamless raster product available as 1 arc-second (approximately 30 meters) for the conterminous United States, and at 1/3 and 1/9 arc-seconds (approximately 10 and 3 meters, respectively) for parts of the United States.
  - o Hydrography: National Hydrography Dataset (NHD), which includes data sets covering all streams and lakes at scales of 1:24,000 and 1:100,000. In some areas, the NHD is being supplemented with data larger than 1:24,000-scale. The NHD provides a true network that supports the analysis of any type of movement (navigation, sediment transport, effluent dispersion, for example) by surface waters (also see “Surface water” below).
  - o Boundaries: Boundaries data or governmental units represent major civil areas including states, counties, Federal, and Native American lands, and incorporated places such as cities and towns.
  - o Transportation: The transportation data theme consists of roads, airports, railroads, and other features associated with the transport of people or commerce. The data includes the location, classification, name or route designator, and for most roads, address ranges.
  - o Land cover: USGS data that show both natural and manmade land cover of the United States. These data were produced in 1992 and

2001. A land-cover change product between 1992 and 2001 also is available. These data sets use a 21-class land-cover classification scheme that includes urban, agricultural, rangeland, forest, surface waters, wetlands, barren lands, tundra, and perennial ice and snow classes. The spatial resolution of the data is 30 meters.

- Landcover data and development trends:
  - [National Land Cover Data](#) (USGS): A consortium of federal agencies (the Multi-Resolution Land Characteristics (MRLC) Consortium) has developed land cover datasets for the United States. Two datasets are available – 1992 and 2001 data – referred to as the [National Land Cover Dataset \(NLCD 1992\)](#) and [National Land Cover Database \(NLCD 2001\)](#). The spatial resolution of the data is 30 meters and the data are provided on a state-by-state basis. These data include 21-classes of land cover, including 10 classes of wetland: woody wetlands, palustrine forested wetland, palustrine scrub/shrub wetland, estuarine forested wetland, estuarine scrub/shrub wetland, emergent herbaceous wetlands, palustrine emergent wetland (persistent), estuarine emergent wetland, palustrine aquatic bed, estuarine aquatic bed.
  - [National Aerial Photography Program](#) (USGS): The aerial photography refers to photographs taken of the entire United States

on a 5- to 7-year cycle. The photos are acquired from airplanes flying at an altitude of 20,000 feet resulting in a scale of 1:40,000. Each 9-by 9-inch photo (without enlargement) covers an area of slightly more than 5 miles on a side. All NAPP photography can be searched and ordered through EarthExplorer at:

<http://edcsns17.cr.usgs.gov/EarthExplorer/>, or [GloVis](#).

## Status and trends in habitat and land use

- [National Wetlands Inventory](#) (FWS): The U.S. Fish and Wildlife Service’s National Wetlands Inventory undertakes studies on the extent and status of the Nation’s wetlands and deep-water habitats. The information is available geospatially on line through FWS. The agency and USGS have also developed the [Wetlands Mapper](#), a tool that allows the user to integrate digital map data with other resource information to produce management and decision support tools.
- [National Land Cover Institute](#) (USGS): The USGS and other agencies and organizations have produced land cover data to meet a wide variety of spatial needs. The Institute provides access to, and scientific and technical support for the use of, the application of a wide variety of land cover data.
- [Land Cover Trends Project](#) (USGS): This USGS project focuses on understanding the rates, trends, causes, and consequences of contemporary U.S. land use and land cover change

from 1973 to 2000 within 84 ecoregions that span the conterminous United States. The project produces a number of statistical and geographic summaries of land cover change. The project makes data available for free download, including five land cover image maps, raw Landsat images, the change matrix images showing all the conversions that occurred between two dates, and the multi-change images indicating the number of times an area changed between 1972 and 2000. All images are in an ERDAS Imagine file format. The data is packaged by ecoregion and compressed into a ZIP file for easy distribution.

- [National Resources Inventory](#) (NRCS): The US Department of Agriculture's Natural Resource Conservation Service undertakes a statistical survey of land use and natural resource conditions and trends on U.S. non-Federal lands.

## Surface water

- [The National Hydrography Dataset](#) (NHD) is a comprehensive set of digital spatial data representing the surface water of the United States using common features such as lakes, ponds, streams, rivers, canals, and oceans. These data are designed to be used in general mapping and in the analysis of surface-water systems using geographic information systems (GIS).
- [NHDPlus](#) is an integrated suite of application-ready geospatial data sets that incorporate many of the best features of the National Hydrography

Dataset (NHD), the National Elevation Dataset (NED), the National Land Cover Dataset (NLCD), and the Watershed Boundary Dataset (WBD). First released in 2006, the NHDPlus consists of nine components:

- o Greatly improved 1:100K National Hydrography Dataset (NHD)
- o A set of value added attributes to enhance stream network navigation, analysis and display
- o An elevation-based catchment for each flowline in the stream network
- o Catchment characteristics
- o Headwater node areas
- o Cumulative drainage area characteristics
- o Flow direction, flow accumulation and elevation grids
- o Flowline min/max elevations and slopes
- o Flow volume & velocity estimates for each flowline in the stream network

## Water quality and condition

- State departments of water quality all maintain data on water quality, permitting, water impairment, etc. Direct links to each state's department of water quality can be found through EPA at: <http://www.epa.gov/ow/region.html>.
  - o Ambient monitoring data
  - o TMDL studies
  - o NPDES discharger information
  - o Water quality assessments and lists of impaired waters
    - [Clean Water Act §305\(b\)](#): Each state develops a water quality



- inventory, or §305(b) report, which it provides to EPA. The reports characterize water quality and identify widespread water quality problems.
- [Clean Water Act §303\(d\)](#): States are also required to submit to EPA data on impaired water and implementation of pollution control efforts for those waters. Since late 2001, EPA has encouraged states to combine their §305(b) and §303(d) reports into one integrated report.
  - The states' integrated reports can be found at: <http://www.epa.gov/waters/ir/>
- o [Probability surveys of the Nation's waters](#): Led by EPA, a series of national aquatic resource surveys has been conducted or is underway. The surveys are designed to yield unbiased, statistically-representative estimates of the condition of the nation's waters. There are five categories of assessments, including wetlands.
- [Wadeable Streams Assessment](#): Released in December 2006, the Wadeable Streams Assessment is a first-ever statistically-valid survey of the biological condition of small streams throughout the U.S. The assessment selected 1,392 sites were selected at random to represent the condition of all streams in regions that share similar ecological characteristics.
  - [National Coastal Condition Report](#): First released in 2001 and updated in 2005 and 2008, the report describes the ecological and environmental conditions in U.S. coastal waters.
  - [National Lakes Assessment](#): Relying upon a probability-based sampling design, the lakes assessment will provide statistically valid regional and national estimates of the condition of lakes. Preliminary findings were released in October 2009.
  - [National Rivers and Streams Assessment](#): Using a random sampling design, this assessment will provide regional and national estimates of the condition of rivers and streams. A final report is scheduled for release in 2011.
  - [National Wetland Condition Assessment](#): Slated for release in 2011, the survey is designed to provide regional and national estimates of the ecological integrity and biological condition of wetlands. It will use a probability-based sample design that will result in statistically-valid estimates of condition for a population of wetlands.

## Other tools

- [NatureServe Vista](#): NatureServe, a national non-profit organization specializing in providing the scientific basis for effective conservation action, has developed Vista, a spatial Decision Support System (DSS) software tool designed to support

conservation planning and integrating conservation with other assessment and planning activities such as land use, transportation, energy, and natural resources management. Vista operates on the ArcView platform and works with a number of other useful software tools to incorporate land use, economics, ecological and geophysical modeling.

# Appendix B



# Oregon

Theodore R. Kulongoski, Governor

## Department of State Lands

775 Summer Street NE, Suite 100

Salem, OR 97301-1279

(503) 986-5200

FAX (503) 378-4844

[www.oregonstatelands.us](http://www.oregonstatelands.us)

### State Land Board

Theodore R. Kulongoski  
Governor

Bill Bradbury  
Secretary of State

Randall Edwards  
State Treasurer

CENWP-OD-G Policy Specialist  
P.O. Box 2946  
Portland, Oregon 97208-2946

Subject: Statement of Sale for (Number of Credits) Wetland  
Mitigation Credits from the (Project Name) to (Permittee Name)

### Date

The Department of State Lands (DSL) has a Memorandum of Agreement with the U.S. Army Corps of Engineers (Corps) to establish and operate an In-Lieu Fee Program.

This letter confirms the sale of (Number of Credits) credits of (Resource Type A), and (Number of Credits) credits of (Resource Type B). These credits are being used as compensatory mitigation for (Number of Acres) acres of impact to (Resource Type A), and (Number of Acres) acres of impact to (Resource Type B) in the (Impact HUC) as authorized by DA permit (DA permit number) and Oregon Removal-Fill Permit/GA (DSL permit number).

By selling credits to the permittee above permittee, DSL is the party responsible for fulfilling the mitigation aspect of the Permit(s) listed above.

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## Environmental Law Institute

2000 L Street, NW, Suite 620

Washington, DC 20036

Telephone: 202.939.3800

Fax: 202.939.3868

[www.eli.org](http://www.eli.org)



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