National In-Lieu Fee Program Training Workshop

Session V: Establishing Fee Schedules (II)
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Seattle District, U.S. Army Corps of Engineers
July 13, 2016
ILF Fee Prices - A Moving Target

- Four years experience with full cost accounting
- Credit prices revised
  - King County ([$28K to ~$45K/credit](#))
    - ~$1.3 million/acre of “typical” impact
  - Hood Canal Coordinating Council ([$28K to ~$35K/credit](#))
    - Preservation used to fulfill advance freshwater credits
    - Marine credits still outstanding
    - Adjust for inflation (~3.6%)
  - Pierce County ([$~$30K – ~$40K/credit](#))
    - Pre-capitalized ILF mitigation sites
    - Concurrent rather than delayed temporal factor
## King County ILF Credit Price Analysis (ILF Instrument)

### Base Credits*

<table>
<thead>
<tr>
<th>Project Name</th>
<th>HSM</th>
<th>Type</th>
<th>Acres of Treatment</th>
<th>Wq</th>
<th>Hy</th>
<th>Ha</th>
<th>Risk Factor**</th>
<th>Total Function credits</th>
<th>Credits/Acre</th>
<th>Site Selection, Planning, Permitting &amp; Design</th>
<th>Construction &amp; Materials</th>
<th>Maintenance &amp; Monitoring</th>
<th>Contingency</th>
<th>Coding %</th>
<th>Large Project Contractor Markup</th>
<th>Long-term M &amp; M</th>
<th>MRP Admin</th>
<th>Total Project Budget</th>
<th>CPI Scaling Factor</th>
<th>2010 Adjusted (Using CPI)</th>
<th>Cost/Universal Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1</td>
<td>Riverine</td>
<td>Enhancement</td>
<td>14.85</td>
<td>0</td>
<td>0</td>
<td>44.55</td>
<td>0.9</td>
<td>40.1</td>
<td>2.7</td>
<td>$161,062</td>
<td>$322,624</td>
<td>$160,278</td>
<td>10%</td>
<td>$64,525</td>
<td>$13,345</td>
<td>$64,996</td>
<td>$690,025</td>
<td>100%</td>
<td>$690,025</td>
<td>$22,206</td>
<td></td>
</tr>
<tr>
<td>Project 2</td>
<td>Depressional</td>
<td>Enhancement</td>
<td>1.38</td>
<td>0</td>
<td>0</td>
<td>5.52</td>
<td>0.9</td>
<td>5.0</td>
<td>3.6</td>
<td>$65,253</td>
<td>$86,850</td>
<td>$75,920</td>
<td>20%</td>
<td>$49,607</td>
<td>$2,100</td>
<td>$24,800</td>
<td>$341,923</td>
<td>100%</td>
<td>$341,923</td>
<td>$68,826</td>
<td></td>
</tr>
<tr>
<td>Project 3</td>
<td>Riverine</td>
<td>Enhancement</td>
<td>5.05</td>
<td>0</td>
<td>0</td>
<td>11.7</td>
<td>0.9</td>
<td>5.05</td>
<td>2.7</td>
<td>$370,852</td>
<td>$285,642</td>
<td>$44,944</td>
<td>20%</td>
<td>$59,120</td>
<td>$770,500</td>
<td>100%</td>
<td>$770,500</td>
<td>100%</td>
<td>$770,500</td>
<td>$48,795</td>
<td></td>
</tr>
<tr>
<td>Project 4</td>
<td>Depressional</td>
<td>Enhancement</td>
<td>6.14</td>
<td>0</td>
<td>0</td>
<td>11.05</td>
<td>0.9</td>
<td>5.0</td>
<td>9.9</td>
<td>$21,356</td>
<td>$123,956</td>
<td>$37,509</td>
<td>20%</td>
<td>$40,597</td>
<td>$12,290</td>
<td>$25,258</td>
<td>$330,837</td>
<td>100%</td>
<td>$401,098</td>
<td>$16,126</td>
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</tr>
</tbody>
</table>

*Acres-point calculations subject to change as the tool is revised. ** Risk Factor values are policy-based.

### Preservation Credits

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Acres Preserved</th>
<th>Preservation Credits</th>
<th>Land Cost (surcharge)</th>
<th>Cost/Preservation Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1</td>
<td>18.67</td>
<td>4.2</td>
<td>$96,948</td>
<td>$23,083</td>
</tr>
<tr>
<td>Project 2</td>
<td>3.9</td>
<td>0.6625</td>
<td>$242,296</td>
<td>$355,012</td>
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<tr>
<td>Project 3</td>
<td>9</td>
<td>1.1</td>
<td>$344,761</td>
<td>$313,419</td>
</tr>
<tr>
<td>Project 4</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Weighted Average cost per credit $28,041

(Subject to change based on further analysis before first credit sale)
King County ILF Land Surcharge was based on Land Type

<table>
<thead>
<tr>
<th>Land Type</th>
<th>North KC (^4)</th>
<th>South KC (^4)</th>
<th>Vashon/Maury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>$65,636</td>
<td>$52,175</td>
<td>$45,337</td>
</tr>
<tr>
<td>Agricultural(^1)</td>
<td>$32,949</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Forest(^2)</td>
<td>$6,982</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Urban(^3)</td>
<td>$302,673</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

(1) Agricultural landcost surcharges are based on five fee purchases of agricultural land in the Green River valley
(2) Forest landcost surcharges are based on a single large transaction involving 7000ac in the Raging River headwaters
(3) Urban landcost surcharges are based on two transactions in Lake Forest Park
(4) The North-South dividing line is interstate 90

King County ILF Land Surcharge will be based on Service Area 2016

<table>
<thead>
<tr>
<th>Property Owner</th>
<th>WRIA</th>
<th>Project</th>
<th>Parcel No(s.)</th>
<th>PM</th>
<th>Price</th>
<th>Closed</th>
<th>Acres</th>
<th>Property Type</th>
<th>Fund Type</th>
<th>Ownership Interest</th>
<th>$/Ac</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attai Family LLC</td>
<td>8</td>
<td>Bear Creek</td>
<td>202606-9083</td>
<td>AH</td>
<td>$500,000</td>
<td>4/15/2011</td>
<td>10.45</td>
<td>Ecological</td>
<td>CFT, PEL</td>
<td>Fee</td>
<td>$47,846.89</td>
</tr>
<tr>
<td>Larry Granston</td>
<td>8</td>
<td>Bear Creek</td>
<td>202606-9005</td>
<td>AH</td>
<td>$810,000</td>
<td>9/1/2011</td>
<td>17.99</td>
<td>Ecological</td>
<td>CFT, PEL</td>
<td>Fee</td>
<td>$45,025.01</td>
</tr>
<tr>
<td>John C. and Dawna J. Klapp</td>
<td>8</td>
<td>Lower Bear Creek Natural Area</td>
<td>312606-9053 312606-9052</td>
<td>AH</td>
<td>$550,000</td>
<td>3/2/2012</td>
<td>1.63</td>
<td>Ecological</td>
<td>CFT, PEL</td>
<td>Fee</td>
<td>$337,423.31</td>
</tr>
<tr>
<td>Ernest F. and Elizabeth Friesen</td>
<td>8</td>
<td>Lower Bear Creek Natural Area</td>
<td>202606-9031</td>
<td>AH</td>
<td>$360,000</td>
<td>11/16/2012</td>
<td>11.85</td>
<td>Ecological</td>
<td>CFT, PEL, SWM</td>
<td>Fee</td>
<td>$30,379.75</td>
</tr>
<tr>
<td>Kirk J. and Kristin S. Doyle</td>
<td>8</td>
<td>Bear Creek</td>
<td>312606-9037</td>
<td>AH</td>
<td>$367,400</td>
<td>12/20/2012</td>
<td>3.02</td>
<td>Ecological</td>
<td>CFT, PEL</td>
<td>Fee</td>
<td>$121,655.63</td>
</tr>
</tbody>
</table>

$2,587,400 44.94

Avg price paid per acre: $57,575
Hood Canal Coordinating Council ILF Land Surcharge

Table 4. Land Fees were determined as an Average Cost per Acre by Land Use Type

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Jefferson County</th>
<th>Kitsap County</th>
<th>Mason County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>$10,410</td>
<td>$17,500</td>
<td>$20,314</td>
</tr>
<tr>
<td>Residential Shoreline</td>
<td>$41,118</td>
<td>$45,996</td>
<td>~</td>
</tr>
<tr>
<td>Floodplain</td>
<td>$27,272</td>
<td>$65,934</td>
<td>$35,934</td>
</tr>
</tbody>
</table>

Revised Table 4. Land Fees will be determined as an Average Cost per Acre by Land Use Type

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Jefferson County</th>
<th>Kitsap County</th>
<th>Mason County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$34,250</td>
<td>$37,400</td>
<td>$25,300</td>
</tr>
<tr>
<td>Marine Shoreline</td>
<td>$180,000</td>
<td>$365,000</td>
<td>$188,000</td>
</tr>
</tbody>
</table>
On-going Issues with ILF Fees

- Consultants pushing back
  - Too expensive
  - Advising clients to develop PRM plans
- Urban sites
  - Contamination; Homeless encampments
  - KC ILF Chinook Winds Site; Pierce County ILF Site
- Administrative duties
  - Tribal Coordination
- Adjusting credit fees
  - Advance vs. Released credits
  - Type of Impact
  - Type of Project
Permittee-Responsible Compensatory Mitigation

Permittee-Responsible mitigation plans must sufficiently demonstrate\(^1\) that it:

- Meets all requirements of the Federal Rule\(^2\)
- Complies with mitigation sequencing
- Will restore an outstanding resource based on rigorous scientific and technical analysis
- Uses a watershed approach for site selection

\(^1\) Preamble of the Federal Rule
\(^2\) 33 CFR 332.4(c)(2) – (14)
Cost as a Consideration for Compensatory Mitigation

Cost is one of several factors evaluated under the Federal Rule’s mitigation preference.

If cost is used as a factor to override the preference hierarchy:

- It cannot be the only reason to not use a Mitigation Bank or ILF Program
- A detailed and comprehensive cost analysis must be submitted for evaluation
Cost as a Consideration for Compensatory Mitigation

The comprehensive cost analysis must include:
- Land Costs
- Construction Costs
- Implementation
- Financial Assurances
- Site Protection Costs
- Contingencies
- Design
- Monitoring
- Reporting
- Maintenance
- Management
- Monitoring
- Reporting

Contracting and consulting fees (10 years):
- Monitoring
- Reporting

Long-term Management Plan (in perpetuity):
- Monitoring
- Reporting
Case Study using Pierce County ILF Program

Credits may be purchased in increments as small as 1/100\textsuperscript{th} of a credit.

Cost per acre-credit\textsuperscript{1}:
- $30k in WRIA 11
- $40k in WRIA 12

\textsuperscript{1} Cost estimates as of 8 June 2016
Case Study using Pierce County ILF Program

Permittee-Responsible Mitigation

$10k  Identify mitigation site
$10k  Develop mitigation plan
$10k  Develop construction plans
$50k  ROW acquisition
$30k  Construct mitigation site
$30k  Monitor & maintain mitigation site

$140k  Total estimated cost for onsite mitigation

Proposed Project: Widen 176th Street East construct an east right-turn lane at its intersection with 78th Avenue East.
Case Study using Pierce County ILF Program

Wetland Fill: 700 square feet
Mitigation Required: 0.6 acre-credits
Onsite Mitigation: $140,000
Pierce County ILF credits: $24,000

Proposed Project:
Widen 176th Street East construct an east right-turn lane at its intersection with 78th Avenue East.
Gail Terzi
Seattle District Corps of Engineers
206-764-6903
gail.m.terzi@usace.army.mil

Questions?