Chapter 105 Draft Technical Guidance Overview

Water Resources Advisory Committee
April 11, 2014
Programmatic Enhancements

- Development of Technical Guidance
  - Resource Condition Assessments
  - Function Based Compensation Protocol
- In Lieu Fee Prospectus
  - PIESCES
Aquatic Resources

- Riverine
  - Intermittent and perennial wadeable watercourses and their floodways/floodplains
- Palustrine/Tidal
  - Wetland environments including unvegetated forms (i.e. mudflats)
- Lacustrine
  - Lakes, reservoirs and non-wadeable rivers
Condition Assessments

* Regulatory Program Uses
  * Environmental Assessment
  * Compensation requirements
  * Reduction of individual biases
  * Standard approach across resource types
Condition Assessments

* Level 2 Rapid Condition Assessments
  * Palustrine (Doc # 310-2137-002)
  * Riverine (Doc # 310-2137-003)
  * Lacustrine (Doc # 310-2137-004)
Condition Assessments

* Standardized Protocols
  * Standard scoring approach
  * Utilized same indices where possible
    * Condition category definitions
* Qualitative – rapid and low cost
  * Addresses most permit applications
Condition Assessments

* Riverine Condition Indices
  * Channel Condition
  * Riparian Vegetation (floodplain)
  * Riparian ZOI Vegetation
  * Instream Habitat
  * Channel Alteration
**Condition Assessments**

- Palustrine Condition Indices
  - Wetland Zone of Influence (ZOI)
  - Roadbed Presence
  - Vegetation Condition
  - Hydrologic Modification
  - Sediment Stressor
  - Water Quality Stressor
Condition Assessments

* Lacustrine Condition Indices
  * Average Depth Condition
  * Riparian Shoreline Vegetation
  * Riparian ZOI Vegetation
  * Shoreline and Near-shore Alterations
* Uses 1-20 scoring then converted to index (0.05-1)
* Assessor determines applicable condition category, then selects score from category range
Riparian Vegetation and ZOI indices–scoring based on scores from condition categories and percent areal coverage

<table>
<thead>
<tr>
<th>Condition Category:</th>
<th>Optimal</th>
<th>Suboptimal</th>
<th>Marginal</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOI areas with tree stratum present (diameter at breast height (dbh) &gt; 3 inches) with greater than or equal to 60% tree canopy cover. Waterways and wetlands located within the ZOI area.</td>
<td>High Suboptimal: ZOI areas with tree stratum (dbh &gt; 3 inches) present, with greater than or equal to 60% tree canopy cover. Waterways and wetlands located within the ZOI area.</td>
<td>Low Suboptimal: ZOI areas with tree stratum (dbh &gt; 3 inches) present, with greater than or equal to 60% tree canopy cover. Waterways and wetlands located within the ZOI area.</td>
<td>High Marginal: Non-maintained, dense herbaceous vegetation with a shrub layer.</td>
<td>Low Marginal: Non-maintained, dense herbaceous vegetation, riparian area lacking shrub.</td>
</tr>
</tbody>
</table>

| Wetland Zone of Influence (300 foot area around perimeter) |

**SCORE:**

1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.
2. Estimate the % area within each condition category. Calculators are provided for you below.
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.

<table>
<thead>
<tr>
<th>Condition Category:</th>
<th>Optimal</th>
<th>High Marginal</th>
<th>Low Marginal</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>% ZOI Area &gt;</td>
<td>65%</td>
<td>25%</td>
<td>10%</td>
<td>100%</td>
</tr>
<tr>
<td>Score &gt;</td>
<td>20</td>
<td>9</td>
<td>6</td>
<td>CI</td>
</tr>
<tr>
<td>% Area * Score =</td>
<td>13</td>
<td>2.25</td>
<td>0.6</td>
<td>15.85</td>
</tr>
</tbody>
</table>
Scoring

- Wetland ZOI (Extends 300 feet from AA)
- Area with desktop Condition Category classification
  - Optimal, High and Low Poor
Function Based Compensation

- Pennsylvania Function Based Compensation Protocol (Doc # 310-2137-001)
  - Standardized Mitigation Process
  - Predictive Expectations
  - Builds on Statewide Consistency
  - Reduces Application Review Time
  - Reduces Applicant/DEP Conflicts
  - Maximizes Information Use
Function Based Compensation

* Pennsylvania Function Based Compensation Protocol (Doc # 310-2137-001)
* Common Resource Language
* Utilized by ILF, Banking and Permittee Responsible Mitigation
* Transparent Compensation Process
Stream Restoration Function Objectives

Identified over 60 riverine functions in five groupings (3 key functions identified below)

Summary of Primary Functions

<table>
<thead>
<tr>
<th>System Dynamics</th>
<th>Hydrologic Balance</th>
<th>Sediment Processes and Character</th>
<th>Biological Support</th>
<th>Chemical Processes and Pathways</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stream Evolution Processes</td>
<td>Surface Water Storage Processes</td>
<td>Sediment Continuity</td>
<td>Biological Communities and Processes</td>
<td>Water and Soil Quality</td>
</tr>
<tr>
<td>Energy Management</td>
<td>Surface / Subsurface Water Exchange</td>
<td>Substrate and Structural Processes</td>
<td>Necessary Habitats for all Life Cycles</td>
<td>Chemical Processes and Nutrient Cycles</td>
</tr>
<tr>
<td>Riparian Succession</td>
<td>Hydrodynamic Character</td>
<td>Quality and Quantity of Sediments</td>
<td>Trophic Structures and Processes</td>
<td>Landscape Pathways</td>
</tr>
</tbody>
</table>

Fischenich, 2006
Hydrogeomorphic (HGM) Wetland Function Models

### Defining Resource Functions

<table>
<thead>
<tr>
<th>Group</th>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrologic</td>
<td>F1</td>
<td>Energy Dissipation/Short-Term Surface Water Detention</td>
</tr>
<tr>
<td></td>
<td>F2</td>
<td>Long Term Surface Water Storage</td>
</tr>
<tr>
<td></td>
<td>F3</td>
<td>Maintain Characteristic Hydrology</td>
</tr>
<tr>
<td></td>
<td>F4</td>
<td>Reserved</td>
</tr>
<tr>
<td>Biogeochemical</td>
<td>F5</td>
<td>Removal of Imported Inorganic Nitrogen</td>
</tr>
<tr>
<td></td>
<td>F6</td>
<td>Solute Adsorption Capacity</td>
</tr>
<tr>
<td></td>
<td>F7</td>
<td>Retention of Inorganic Particulates</td>
</tr>
<tr>
<td></td>
<td>F8</td>
<td>Export of Organic Carbon (dissolved and particulate)</td>
</tr>
<tr>
<td>Habitat</td>
<td>F9</td>
<td>Maintain Characteristic Native Plant Community Composition</td>
</tr>
<tr>
<td></td>
<td>F10</td>
<td>Maintain Characteristic Detrital Biomass</td>
</tr>
<tr>
<td></td>
<td>F11</td>
<td>Vertebrate Community Structure and Composition</td>
</tr>
<tr>
<td></td>
<td>F12</td>
<td>Maintain Landscape Scale Biodiversity</td>
</tr>
</tbody>
</table>
## Standardized Function Approach

* Establishes the same framework for all resource types

<table>
<thead>
<tr>
<th>Function Group</th>
<th>Wetland</th>
<th>Riverine</th>
<th>Lacustrine</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrologic (HYD)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>Hydrodynamics, storage, baseflow</td>
</tr>
<tr>
<td>Biogeochemical (BGC)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>Vegetation, soils and hydrology</td>
</tr>
<tr>
<td>Habitat (HAB)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Community and species level</td>
</tr>
<tr>
<td>Recreation (REC)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>Public recreational opportunities</td>
</tr>
<tr>
<td>Resource Support (RS)</td>
<td></td>
<td></td>
<td>✓</td>
<td>Role in maintaining water quality</td>
</tr>
</tbody>
</table>
Riverine Function Groups

- Hydrologic:
  - Flood storage capacity
  - Energy dissipation
  - Watershed dynamics
  - Geomorphic stability
  - Sediment transport

- Biogeochemical:
  - Biogeochemical processes
    - Temperature regulation
    - Nutrient and organic matter cycling

- Habitat:
  - Physical attributes supporting the life requirements of species within or on the banks of an active watercourse

- Resource Support / Recreation:
  - Maintain watershed dynamics and quality
    - Public recreation opportunities

Pennsylvania Department of Environmental Protection
Standardized Function Approach

Hydrologic (HYD1)

Biogeochemical (BGC1)  Habitat (HAB1) and Recreation (REC1) or Resource Support (RS)  BGC1

Courtesy of the Integration and Application Network, University of Maryland Center for Environmental Science (ian.umces.edu/symbols/).
Wetland Function Groups

**Hydrologic**
- Short/long term storage
- Energy dissipation
- Maintain characteristic dynamics

**Biogeochemical**
- Solute adsorption capacity
- Biogeochemical processes
- Nutrient and organic matter cycling

**Reserved**

**Habitat**
- Physical attributes supporting the life requirements of wetland dependent species
Lacustrine Function Groups

- Physical attributes supporting the macrophytes and fishery populations

- Public Use Facilities
  - Public Access

Diagram:
- Habitat
- Recreation
- Reserved
- Reserved
Compensation Factors

- Compensation Determination by Resource Function Group
  - Impact Area – by Resource Function and Impact Type (acres)
  - Project Effect Factor (Scale 0-3)
  - Resource Value (Scale 1-3)
  - Resource Condition Index (Scale 0.05-1)
Establishing Impacts

* Impacts categorized as
  * **Direct** – loss of resource *area* and function
    * Occurs through filling, draining, impounding
  * **Indirect** – loss of resource function only
    * Occurs through alteration of chemical, physical or biological components of the resource
Specific Criteria to assign the level of project effect for each resource function group

* Criteria for both Direct and Indirect impacts
  * Severe – complete loss of area and function
  * Moderate
  * Limited
  * Minimal – small to no loss of area, rapid recovery of altered function(s)
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</thead>
<tbody>
<tr>
<td>HYD1</td>
<td></td>
<td></td>
<td>1. Fills or structures that result in any increase in the 100-year frequency water surface elevation in a delineated FEMA mapped floodway; or</td>
<td>1. No hydrologic modification through draining, flooding, topographic modification or from stormwater discharges.</td>
<td>HYD2</td>
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<td>N/A</td>
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<tr>
<td></td>
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<td>2. Fills that eliminate significant portions of the floodplain of streams with ≤ 6,400 acre drainage areas extending along &gt; 500 linear feet of stream length.</td>
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<td>BGC1</td>
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<td></td>
<td>1. Floodplain ability to support vegetation eliminated through filling/development; or</td>
<td>1. Typical hydrology, hydrodynamics and vegetation structure maintained for HGM subclass and vegetation type.</td>
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<td>2. Floodplain converted to open water body of water through inundation; or</td>
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<td>3. Floodplain vegetation isolated from accessing groundwater table via activities that lower groundwater table levels (e.g. dredging of stream channel, filling of floodplain areas)</td>
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<td>1. Fills or structures that do not result in a rise in the 100-year frequency water surface elevation of the natural unobstructed water surface elevation and fills are not located in portions of the floodplain of streams with ≤ 6,400 acre drainage areas.</td>
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<td>2. Wetland connection to stream/floodplain or other natural surface drainage features contributing to hydrologic source of wetland lost; or</td>
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<td>3. Wide spread hydrologic modification through draining, flooding or topographic modification.</td>
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<td>BGC2</td>
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<td>HYD1</td>
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<td></td>
<td>1. Wetland area converted to open water or dry land (non-wetland) through inundation or filling; or</td>
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<td>2. Wetland area converted to open water or dry land (non-wetland) through inundation or filling; or</td>
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<td>HAB1</td>
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<td>1. Bridges spanning the channel and floodplain, no instream piers.</td>
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<td>1. Greater than 60% of the individual delineated wetland area affected by vegetation clearing or long term vegetation management.</td>
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<td>HAB2</td>
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<td></td>
<td></td>
<td></td>
<td>REC1</td>
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<td>1. Recreational uses unimpeded or maintained without altering recreational use.</td>
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<td>RS</td>
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<td></td>
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<td>1. Stream not eliminated, enclosed or disconnected from the groundwater table; or</td>
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<td>2. Cumulative total of a project less than or equal to 0.02 ak drainage areas.</td>
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<td></td>
<td>HAB3</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1. Area of dock ≤ 0.02 ak and maintenance dredging extending outward no more than 10 feet around structure.</td>
<td></td>
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<td></td>
<td></td>
<td>REC2</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td>1. Recreational uses unimpeded or maintained without altering recreational use.</td>
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</tr>
</tbody>
</table>
Resource Value

* Resource Value

* Varies by resource type
  * Foundation in regulations, science and public interest (e.g., Special Protection, Rare wetland communities, special fishery designations)

* Standardized list of values
Resource Condition

- Use Rapid Condition or Intensive Measures
  - Since index based, other approaches usable
  - Process can adapt to utilize best approaches
- Provides reasonableness to compensation
  - Low quality resources result in reduced amount
  - High Quality resources result in increased amount
Standard Compensation Equation

\[ CR = AI \times PE \times RV \times CI \]

- CR = Compensation Requirement
- AI = Area of Impact (in acres, 0.00)
- PE = Project Effect Factor
- RV = Resource Value
- CI = Condition Index Value (0.00) (from applicable resource condition assessment)
Establishing Compensation

* Compensation evaluation performed for each resource function group affected by project

* Process designed to ensure resource/functional equivalency provided as compensation
Project Example

- 25 foot construction ROW
- 50 foot ROW and utility line
- 35 foot wide road
## Riverine Resource Impacts

<table>
<thead>
<tr>
<th>Resource Area</th>
<th>Road</th>
<th>Perm ROW</th>
<th>Temp ROW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Floodway</strong></td>
<td>35 x 275</td>
<td>50 x 275</td>
<td>25 x 275</td>
</tr>
<tr>
<td><strong>Acreage</strong></td>
<td>0.22</td>
<td>0.32</td>
<td>0.16</td>
</tr>
<tr>
<td><strong>Stream Channel</strong></td>
<td>35 x 60</td>
<td>50 x 60</td>
<td>25 x 60</td>
</tr>
<tr>
<td><strong>Acreage</strong></td>
<td>0.05</td>
<td>0.07</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>RECI</strong></td>
<td></td>
<td></td>
<td>0.75</td>
</tr>
<tr>
<td><strong>Resource Value</strong></td>
<td></td>
<td></td>
<td>2.00</td>
</tr>
</tbody>
</table>

*Small streams with greater than 1,280 acre drainage areas but less than or equal to 6,400 acre drainage areas, streams designated Trout Stocked Fisheries (TSF) under Ch. 93 and streams with other recreation valued species present with sufficient populations to provide recreational opportunities.
## Aquatic Resource Value Category

### Quality Resource Waters

<table>
<thead>
<tr>
<th>Waterways</th>
<th>Wetlands</th>
<th>Large Rivers/Reservoirs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small streams with greater than 1,280 acre drainage areas but less than or equal to 6,400 acre drainage areas, streams designated Trout Stocked Fisheries (TSF) under Ch. 93 and streams with other recreation valued species present with sufficient populations to provide recreational opportunities.</td>
<td>This category includes all other wetlands not categorized as significant, special, support or minimal resource wetlands. Wetlands that support a quality aquatic community based upon upon scoring equal to or greater than greater than or equal to 0.42 but less than 0.58 using the DEP’s Wetland Condition Level 2 Rapid Assessment Protocol.</td>
<td>Includes all other waters not categorized as significant, special, support or minimal resource waters.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
</tr>
</tbody>
</table>
* Project Effect Factor assigned to each function group for related activities

* PE values can vary from function group to function group

### Riverine Project Effect

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>PE Function Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HYD1</td>
</tr>
<tr>
<td>Road</td>
<td>1.0</td>
</tr>
<tr>
<td>Temporary ROW</td>
<td>0.0</td>
</tr>
<tr>
<td>Permanent ROW</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Calculating Compensation

* Road
  * HYD1 = 0.27 x 1.0 x 2.0 x 0.75 = 0.41
  * BGC1 = 0.22 x 3.0 x 2.0 x 0.75 = 0.99
  * HAB1 = 0.05 x 3.0 x 2.0 x 0.75 = 0.23
  * REC1 = 0.05 x 3.0 x 2.0 x 0.75 = 0.23

(CR) = AI x PE x RV x CI
Calculating Compensation

- **Temporary ROW**
  - HYD1 = 0.19 x 0.0 x 2.5 x 0.75 = 0.0
  - BGC1 = 0.16 x 1.0 x 2.5 x 0.75 = 0.30
  - HAB1 = 0.03 x 0.0 x 2.5 x 0.75 = 0.0
  - REC1 = 0.0 x 0.0 x 2.5 x 0.75 = 0.0

\[(CR) = AI \times PE \times RV \times CI\]
Calculating Compensation

* **Permanent ROW**
  
  * HYD1 = 0.39 x 0.0 x 2.5 x 0.75 = 0.0
  * BGC1 = 0.32 x 2.0 x 2.5 x 0.75 = 1.20
  * HAB1 = 0.07 x 1.0 x 2.5 x 0.75 = 0.13
  * REC1 = 0.07 x 0.0 x 2.5 x 0.75 = 0.0

(CR) = AI x PE x RV x CI
* Compensation requirement in the form of unitless resource function credits

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Compensation Requirement Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HYD1</td>
</tr>
<tr>
<td>Road</td>
<td>0.41</td>
</tr>
<tr>
<td>Temporary ROW</td>
<td>0.00</td>
</tr>
<tr>
<td>Permanent ROW</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>0.41</strong></td>
</tr>
</tbody>
</table>
Wetland Resource Impacts

<table>
<thead>
<tr>
<th>Wetland</th>
<th>Road</th>
<th>Perm ROW</th>
<th>Temp ROW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage</td>
<td>0.28</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>WCI</td>
<td></td>
<td></td>
<td>0.68</td>
</tr>
<tr>
<td>Resource Value*</td>
<td></td>
<td></td>
<td>2.50</td>
</tr>
</tbody>
</table>

* Wetland supports a high quality aquatic community based on Level 2 assessment.
## Resource Value

### Special Resource Waters

<table>
<thead>
<tr>
<th>Riverine</th>
<th>Wetland</th>
<th>Lacustrine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waters with a designated or existing use of High Quality under Chapter 93 (relating to water quality standards). Waters with a designated or existing use of Migratory Fish and used by migratory fish populations for reproduction (not just passage). Waters designated with special regulations by the PA FBC as big bass waters or trophy trout waters. Geographically unique or rare fisheries (i.e. salmon or steelhead waters, naturally reproducing northern pike</td>
<td>Wetlands that are located in or along the floodplain of the reach of waters with a designated or existing use listed as high quality under Chapter 93 (relating to water quality standards). Wetlands that support a high quality aquatic community based upon scoring equal to or greater than 0.58 but less than 0.87 using the DEP's Wetland Condition Level 2 Rapid Assessment Protocol. Wetlands characterized by the DCNR's natural community classification system and designated a State Rank of S3 Vulnerable.</td>
<td>Waters with a designated or existing use of High Quality under Chapter 93 (relating to water quality standards). Waters designated with special regulations by the PA FBC as big bass waters or trophy trout waters.</td>
</tr>
</tbody>
</table>

2.5
Project Effect Values

* Project Effect Factor assigned to each function group for related activities
* PE values will vary from function group to function group

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>PE Function Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HYD2</td>
</tr>
<tr>
<td>Road</td>
<td>3.0</td>
</tr>
<tr>
<td>Temporary ROW</td>
<td>0.0</td>
</tr>
<tr>
<td>Permanent ROW</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Calculating Compensation

* **Road**
  * HYD2 = 0.28 x 3.0 x 2.5 x 0.68 = 1.43
  * BGC2 = 0.28 x 3.0 x 2.5 x 0.68 = 1.43
  * HAB2 = 0.28 x 3.0 x 2.5 x 0.68 = 1.43

\[(CR) = AI \times PE \times RV \times CI\]
Calculating Compensation

* Temporary ROW
  * HYD2 = 0.20 $\times$ 0.0 $\times$ 2.5 $\times$ 0.68 = 0.0
  * BGC2 = 0.20 $\times$ 1.0 $\times$ 2.5 $\times$ 0.68 = 0.34
  * HAB2 = 0.20 $\times$ 0.0 $\times$ 2.5 $\times$ 0.68 = 0.0

(CR) = AI $\times$ PE $\times$ RV $\times$ CI
Calculating Compensation

* **Permanent ROW**
  
  * HYD2 = 0.40 x 0.0 x 2.5 x 0.68 = 0.0
  * BGC2 = 0.40 x 2.0 x 2.5 x 0.68 = 1.36
  * HAB2 = 0.40 x 1.0 x 2.5 x 0.68 = 0.68

(CR) = AI x PE x RV x CI
Compensation requirement in the form of unitless resource function credits

### Wetland Summary

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Compensation Requirement Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HYD2</td>
</tr>
<tr>
<td>Road</td>
<td>1.43</td>
</tr>
<tr>
<td>Temporary ROW</td>
<td>0.00</td>
</tr>
<tr>
<td>Permanent ROW</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Credits</td>
<td><strong>1.43</strong></td>
</tr>
</tbody>
</table>
Producing Function Credits

\[(FCG) = AP \times CV \times RV \times CI\]

- **FCG** = Function Credit Gain
- **AP** = Area of project gain (in acres, 0.00)
- **CV** = Compensation Value Factor
- **RV** = Resource Value
- **CIDIFF** = Condition Index Differential Value (0.00) (difference between existing condition and projected/measured condition)
Producing Function Credits

* Area of project gain
  * Defining discrete areas of gains
    * 2008 Mitigation rule definitions
    * Existing resource conditions
  * Established for each resource function group
    * Can vary in a given unit of area
    * Must be demonstrated through measurable methodologies
Produce Function Credits

* Compensation Value
  * Considers extent of project
    * Multiple resources and function groups
    * Project type – re-establishment, rehabilitation, etc.
  * Established for project unless resources are distantly located from each other and considered independent sites.
Producing Function Credits

* Resource Value
  * Utilizes same Resource Value table and criteria (1-3)
    * Established for each resource not carried from one type of resource to another.
  * Resources not interconnected or areas of larger related resources with disparate conditions may have differing resource values (i.e. wetland complexes, isolated wetland areas, stream reaches distantly located).
* **Condition Differential**
  
  * Level 2 Condition Assessment Use
    * Generally for planning purposes, not intended for final credit determination
  
  * Existing Condition must be established in order to project and establish resource improvement.

  * As design proceeds identification of causal sources and restorative approaches provides basis for selection of key parameters that provide quantitative measure of improvement and selection of performance measures and success criteria.
Next Steps

* Comment period ends May 7th
* Revisions
* Comment Response Document
* Application Form Revisions
* Training and Outreach
* Final Publication
Questions?

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717 772 5971