“The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.”
COLORADO MITIGATION PROCEDURES (COMP V1)

• Provides regulatory direction for wetland and stream mitigation; stream debit and credit calculator based on functional loss and improvement assessed using existing qualitative methods

• Was originally adapted from similar methodologies used in other Corps Districts that have been in effect for several years

• Not intended to be a comprehensive guide for addressing compliance with the 2008 final Mitigation Rule on compensatory mitigation for losses of aquatic resources

• Currently out on Public Notice - Any comments received through September 7, 2019 will be considered by the Corps to determine whether to modify, adopt, or terminate the use of the COMP
WHY?

- Credits and debits are units of measure (e.g., a functional or areal measure or other suitable metric) that represent the accrual or attainment of aquatic functions at a mitigation site, or the loss of aquatic functions at an impact site (33 CFR 332.2)

- Establish a procedure for quantifying compensatory mitigation debits and credits that will provide predictability and consistency

- Predictability and consistency:
  - Site-to-site
  - District-to-District
  - Regulator-to-regulator
DEBITS AND CREDITS
SECTION 404 OF CLEAN WATER ACT

*Debit* is a unit of measure (e.g. a functional or areal measure or other suitable metric) representing the loss of aquatic functions at an impact or project site. (33 CFR 332.2)

*Credit* is 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. (33 CFR 332.2)
WETLAND CREDITING AND DEBITING

Credit calculation:
• Calculated using COMP proposed ratios
• Type of mitigation activity (establishment, re-establishment, enhancement, rehabilitation, preservation) drives the number of credits generated

Debit calculation:
• Calculated using SPD Mitigation Ratio Setting Checklist
• Starts with base ratio of 1:1, adjusted by impact-mitigation comparison
• Accounts for functional factors such as location, conversion, temporal loss
WETLAND CREDITING

- Primarily intended for use in determination of mitigation banking credits
- Functional scores may help inform an appropriate range for credit ratios
- Feeds into MRSC

<table>
<thead>
<tr>
<th>Mitigation Activity</th>
<th>Credit Ratio (Work Area:Credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetlands</td>
<td></td>
</tr>
<tr>
<td>Re-establishment</td>
<td>1:1 - 2:1</td>
</tr>
<tr>
<td>Establishment</td>
<td>1:1 - 2:1</td>
</tr>
<tr>
<td>Rehabilitation of function</td>
<td>2:1 - 3:1</td>
</tr>
<tr>
<td>Enhancement of existing state</td>
<td>3:1 - 5:1</td>
</tr>
<tr>
<td>Preservation in combination with above activities, and as considered per the criteria at 33 CFR 332.3(h)</td>
<td>5:1-10:1*</td>
</tr>
<tr>
<td>Preservation alone</td>
<td>Case-by-Case as considered per the criteria at 33 CFR 332.3(h)*</td>
</tr>
<tr>
<td>Uplands</td>
<td></td>
</tr>
<tr>
<td>Upland buffer enhancement and preservation</td>
<td>5:1-15:1*</td>
</tr>
</tbody>
</table>

*Total combined buffer/preservation credit typically cannot exceed 10% of the total bank credit
WETLAND DEBITING

MRSC

- Considers functional based factors
  - Distance
  - Conversion
  - Timing/Temporal Loss

- Functional scores can factor in ratio setting

- Thresholds
  - More than minimal
  - Typically 0.10 acre
STREAM CREDITING AND DEBITING

- Colorado Stream Quantification Tool (CSQT) is a spreadsheet calculator that consolidates a suite of metrics into a single condition score, and then multiplies that score by stream length to generate the Functional Feet Score.

- Applied at a site before and after a project to calculate a change (delta) between existing condition and proposed condition (loss or gain).

- Relies on the ΔFunctional Feet as the basis for calculating stream mitigation credits and debits.

- COMP v1 includes Appendix A – Stream Debit Calculation Guide which provides a step-by-step instructions on how project impacts and functional loss can be evaluated.
CALCULATING FUNCTIONAL LIFT AND LOSS

QUANTITY (linear feet of stream) \( \times \) CSQT CONDITION SCORE (\% function) = FUNCTIONAL FEET

Functional lift or loss is \((\Delta\text{Functional Feet})\)

\[ = \text{Proposed FFS} - \text{Existing FFS} \]

The delta can be either positive or negative. The delta is the unit of measure representing the loss or accrual of aquatic functions at an impact or project site.
STREAM THRESHOLDS

- All activities with permanent loss of 300 linear feet of stream or more (i.e., due to activities that result in reduced natural stream length like piping or channelization)

- All activities authorized by a general permit with permanent impacts to greater than 500 linear feet of stream (i.e., other activities which impact stream function but do not necessarily result in loss of stream length or area)

- All activities resulting in permanent impacts to streams that meet one of the following criteria:
  - Projects requiring a Standard Individual Permit
  - Nationwide Permits that require a waiver
  - Establishment of a mitigation bank or ILF
REMINDER

Currently out on PN until October 11, 2019