Chatfield Reallocation Ecological Functions Analysis

U.S. Army Corps of Engineers and Chatfield Reservoir Mitigation Company, Inc.

- Develop Habitat Design Criteria
- Review of Impact Ecological Function Units (EFUs)
- Review Mitigation Area Baseline EFUs
- Review Mitigation Area Preliminary Design EFUs
- EFU Update Report and GIS Database
- On-site Groundwater Well Monitoring

On-Site Resource Mapping

- Bird Habitat Mapping
- Preble’s Habitat Mapping
- Wetland Habitat Mapping
- Map habitat polygons for each resource/establish baseline for maximum inundation levels
- Complete field assessment and data forms
- Define and assign an EFI value for each resource
- Calculate Debits and Credits
- Calculate the Chatfield reallocation impacts for maximum reservoir elevation and convert to EFU
- Credits Calculate baseline EFUs for on-site mitigation areas
- Calculate habitat degradation since 2011
- Calculate predicted degradation
- Review EM-2
- EFU lift
- EFU protection

Preservation Concept
Adapted from Clayton Ridenour/Corps.

Habitat quality due to head cutting

Observed

Future with Extensive Protection
Future with Moderate Protection
Future with Basic Protection
Future without Protection

Present 10 Years 20 Years 30 Years

Headcutting along Plum Creek