

ECO-ASSET MANAGEMENT, LLC

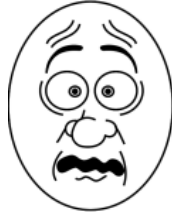
CONSERVATION BANKS – WHEN AVOIDANCE AND MINIMIZATION ARE NOT ENOUGH



TYPICAL PROJECT DEVELOPMENT PROCESS

❑ Rearrange the landscape to accommodate mine footprint – traditional process:

- ❑ Feasibility analyses;
- ❑ Planning and budgeting;
- ❑ Site plans, project sequencing;
- ❑ Permitting, Remediation Plans;
- ❑ MITIGATION & LONG-TERM LIABILITY



❑ Regulatory Drivers:

- ❑ SMCRA
- ❑ 404 Clean Water Act (CWA)
- ❑ 401 CWA
- ❑ Endangered Species Act (ESA)

WHAT IS AQUATIC RESOURCE MITIGATION?

- Per 33 CFR 332, mitigation is an action taken to off-set an unavoidable adverse impact to wetlands, streams and other aquatic resources
- Compensatory mitigation is a critical tool in meeting the longstanding national goal of no net loss of aquatic resource acreage and function
- Only considered after all appropriate and practicable steps have been taken to avoid and minimize impact
- Can be carried out through four recognized methods (in order of effectiveness and preference):
 - Restoration (rehabilitation and/or re-establishment)
 - Enhancement
 - Creation
 - Preservation



AQUATIC RESOURCE MITIGATION UNDER CWA

▣ Forms of Mitigation Under 33 CFR 332 (in order of preference):

- ▣ Mitigation Bank Credits;
- ▣ Fees Paid In-Lieu of Mitigation;
- ▣ Permittee-responsible (watershed context, restoration/enhancement)
- ▣ Permittee-responsible (on-site, in-kind)
- ▣ Permittee-responsible (off-site and/or out-of-kind)



WHAT IS SPECIES/HABITAT MITIGATION?

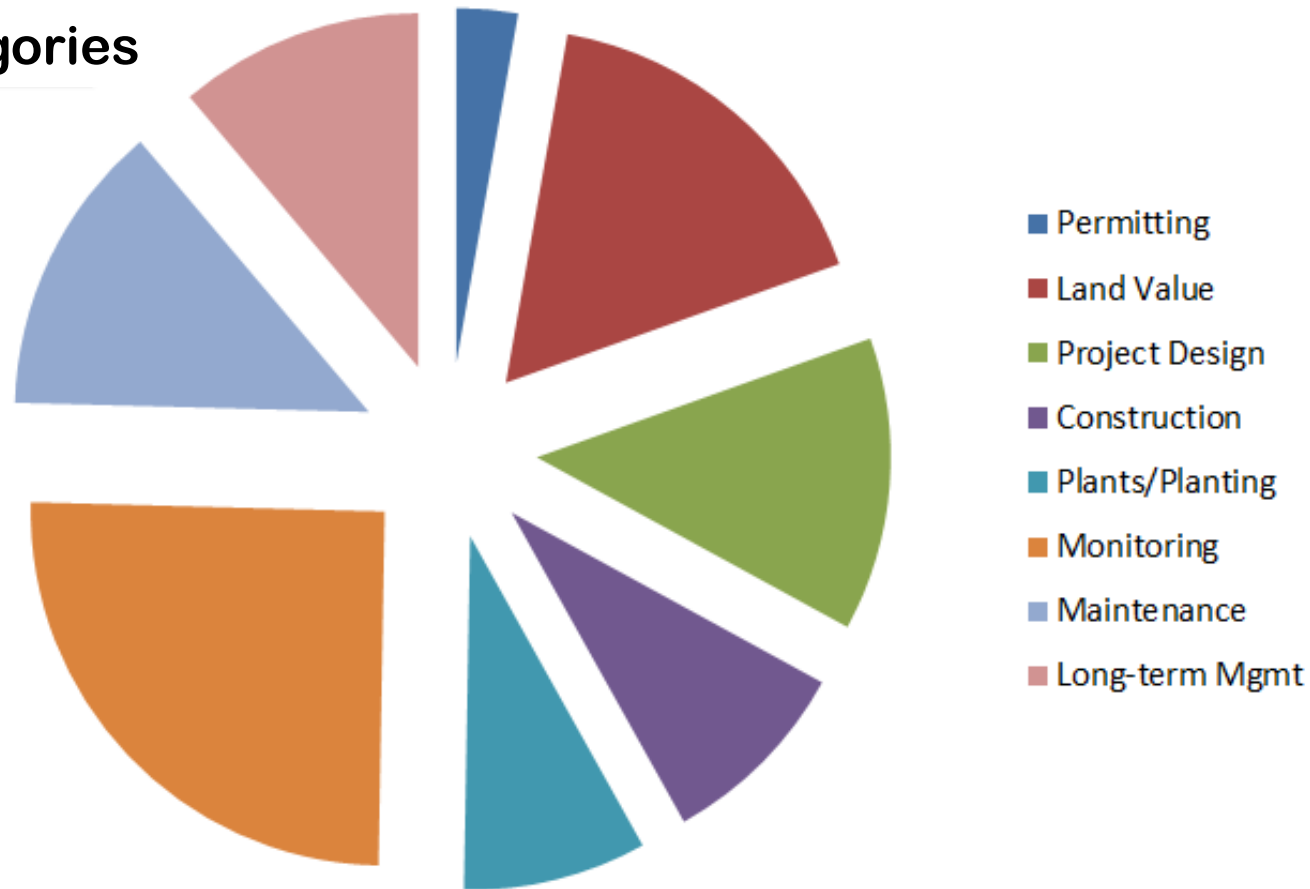
- Prescribed under the Endangered Species Act
 - Per Section 7(a)(1) of ESA, federal agencies are required to support the USFWS mission to conserve listed species
 - Recovery of species generally cannot be achieved project-by-project
 - Mitigation can be required to limit “take” or other impacts to species
 - Mitigation can take several forms, including habitat preservation, enhancement and restoration

- Supported by state Environmental Policy Acts
 - Montana Environmental Policy Act requires coordination with MT Fish, Wildlife and Parks on wildlife and habitat issues, including impacts to species of concern



SOURCES OF COSTS OF MITIGATION

Cost Categories



- Agencies require that permittees complete lengthy mitigation checklists and provide documentation for anticipated costs: 6 – 36 months
- “Permittee-responsible” : \$0,000’s per credit + up to 10 yrs operational liability + long-term management endowment funding and liability
- Failure to meet performance standards can mean additional mitigation, monitoring and extended liability, without end

RESTORATION WETLANDS



Before



After



RESTORATION LIVE WATER



Before



After



RESTORATION SPECIES HABITAT



Traditional Sagebrush Treatment



Spring Grazing Only



Restored / Well-managed
Habitat

WETLAND/STREAM MITIGATION BANKING APPLICATIONS FOR MINING

HISTORY:

- 1977 Surface Mining Control and Reclamation Act
- 1995 Federal Guidance on mitigation banking
- 2001 NAS/NRC study of compensatory mitigation (up to 50% failure nationwide)
- 2001 GAO report on effectiveness of In Lieu Fee programs (seriously flawed)
- 2001 National Mitigation Action Plan (no net loss of wetland values/functions via mitigation *in advance*)
- Regulatory Guidance Letter 02-02
- 2006 (draft rule) and 2008 (final rule) →



Federal Register

Thursday,
April 10, 2008

Part II

Department of Defense


Department of the Army, Corps of
Engineers
33 CFR Parts 325 and 332

Environmental Protection Agency

40 CFR Part 230
Compensatory Mitigation for Losses of
Aquatic Resources; Final Rule

SPECIES CONSERVATION BANKING APPLICATIONS FOR MINING

HISTORY:

- 1977 Surface Mining Control and Reclamation Act
- 1977 Endangered Species Act
- 2003 USFWS Guidance on Establishment, Use and Operation of Conservation Banks 
- 2000 – 2015 Multiple Protected Species/Habitat Banks established nationwide
- 2013 Secretary's Order No. 3330 on Improving Mitigation Policies
- 2015 First Sage Grouse Mitigation Bank Proposed (in WY); first Lesser Prairie Chicken Bank approved (KS)



ADDRESS ONLY THE DIRECTOR,
FISH AND WILDLIFE SERVICE

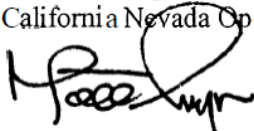
United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

MAY 2 2003

Memorandum

To: Regional Directors, Regions 1-7
Manager, California Nevada Operations

From: Director 

Subject: Guidance for the Establishment, Use, and Operation of Conservation Banks



THE SECRETARY OF THE INTERIOR
WASHINGTON

ORDER NO. 3330

Subject: Improving Mitigation Policies and Practices of the Department of the Interior

STATUTORY & POLICY PREFERENCES FOR WETLAND BANK CREDITS

PER 33 CFR 332:

- Mitigation bank credits, which are approved, protected and financially guaranteed in advance, help reduce risk and uncertainty
- Credits reduce temporal losses of habitat values because resources are protected in advance of impacts
- Credits are not available to be used by permittees for authorized projects until specific milestones associated with bank performance are met, therefore risk of failure is minimized
- Mitigation banks involve larger, more ecologically valuable landscapes, and rigorous scientific and technical analyses
- Mitigation banks require advance site identification, project-specific planning, and significant investment of financial resources

“For these reasons, the District Engineer should give preference to the use of mitigation bank credits....”

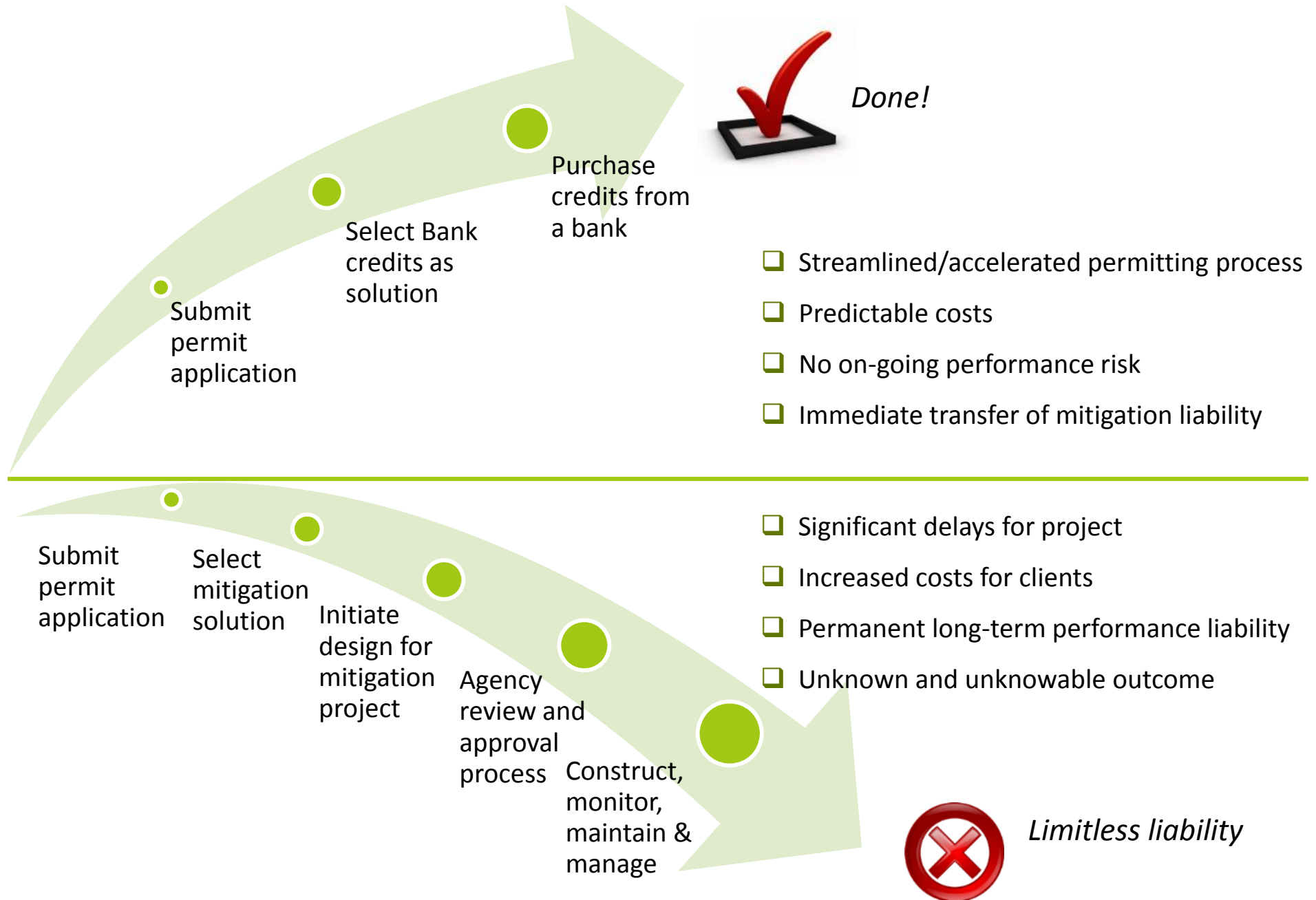
STATUTORY & POLICY PREFERENCES FOR BANK CREDITS

SPECIFIC STATUTE, POLICY AND GUIDANCE EXPRESSING A PREFERENCE FOR MITIGATION BANK CREDITS:

- ❑ 33 CFR 332, Corps public works projects
- ❑ 40 CFR 230 (EPA mitigation guidance)
- ❑ TEA-21, SAFETEA-LU, subsequent Transportation Acts and continuing resolutions, including FHWA Guidance
- ❑ FAA Guidance and policy
- ❑ FEMA Guidance and policy
- ❑ Water Resource Development Acts (2005 – present)

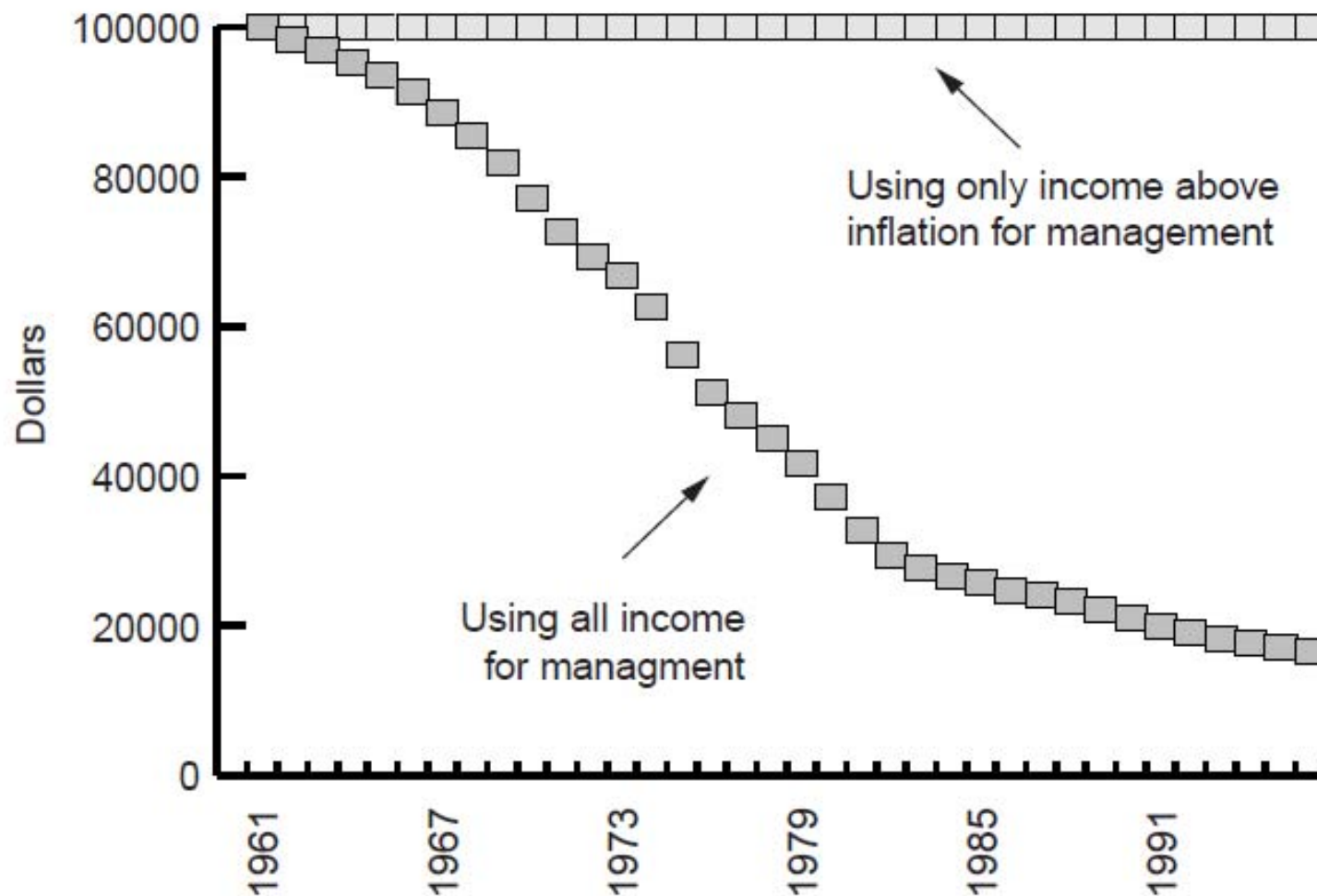


MITIGATION BANK CREDITS VS. PERMITTEE RESPONSIBLE MITIGATION



PERMITTEE RESPONSIBLE MITIGATION ACCOUNTING FOR LONG-TERM FUNDING

- Mitigation projects require a “long-term financial mechanism” which ensures the success, protection and management of mitigation areas IN PERPETUITY – can be \$\$millions in permanent endowment



WHY BANK CREDITS ARE SO BENEFICIAL

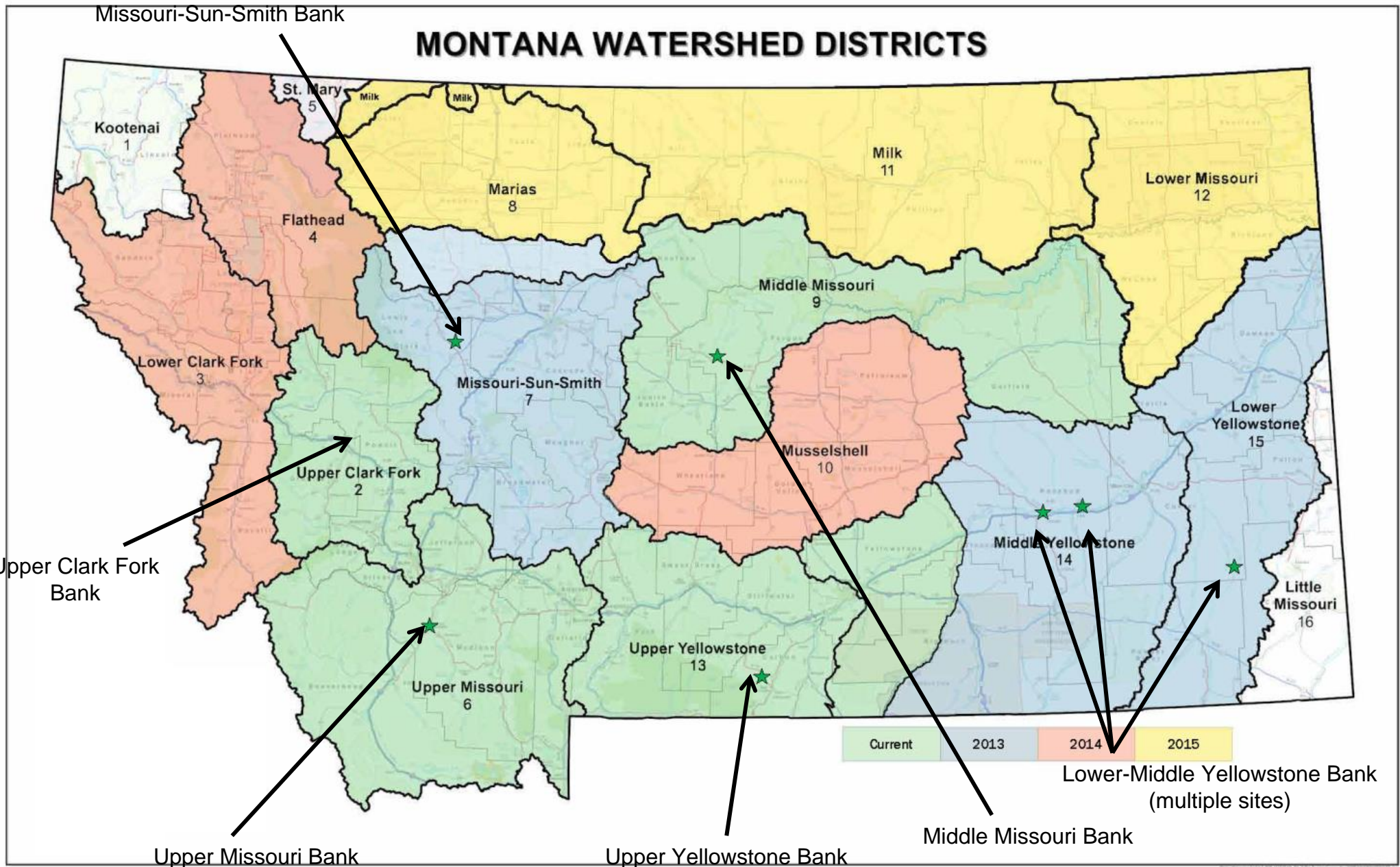
- ▣ 1:1 credits:debits for advance mitigation (after-the-fact mitigation DOUBLE – up to 2:1 (credits:debits) or more
- ▣ Agency endorsements in advance
 - ✔ US Army Corps of Engineers
 - ✔ US EPA
 - ✔ US Fish and Wildlife Service
 - ✔ Montana DEQ
 - ✔ Montana Fish, Wildlife and Parks
- ▣ Time efficiencies: Reduce permitting to weeks rather than years
- ▣ Cost effectiveness: Credits developed at scale, so 20% - 30% lower cost than permittee-responsible
- ▣ 100% successful every time
- ▣ ALL liability and risk transfers to Mitigation Bank immediately and permanently

MITIGATION/CONSERVATION BANKING APPLICATIONS FOR MINING

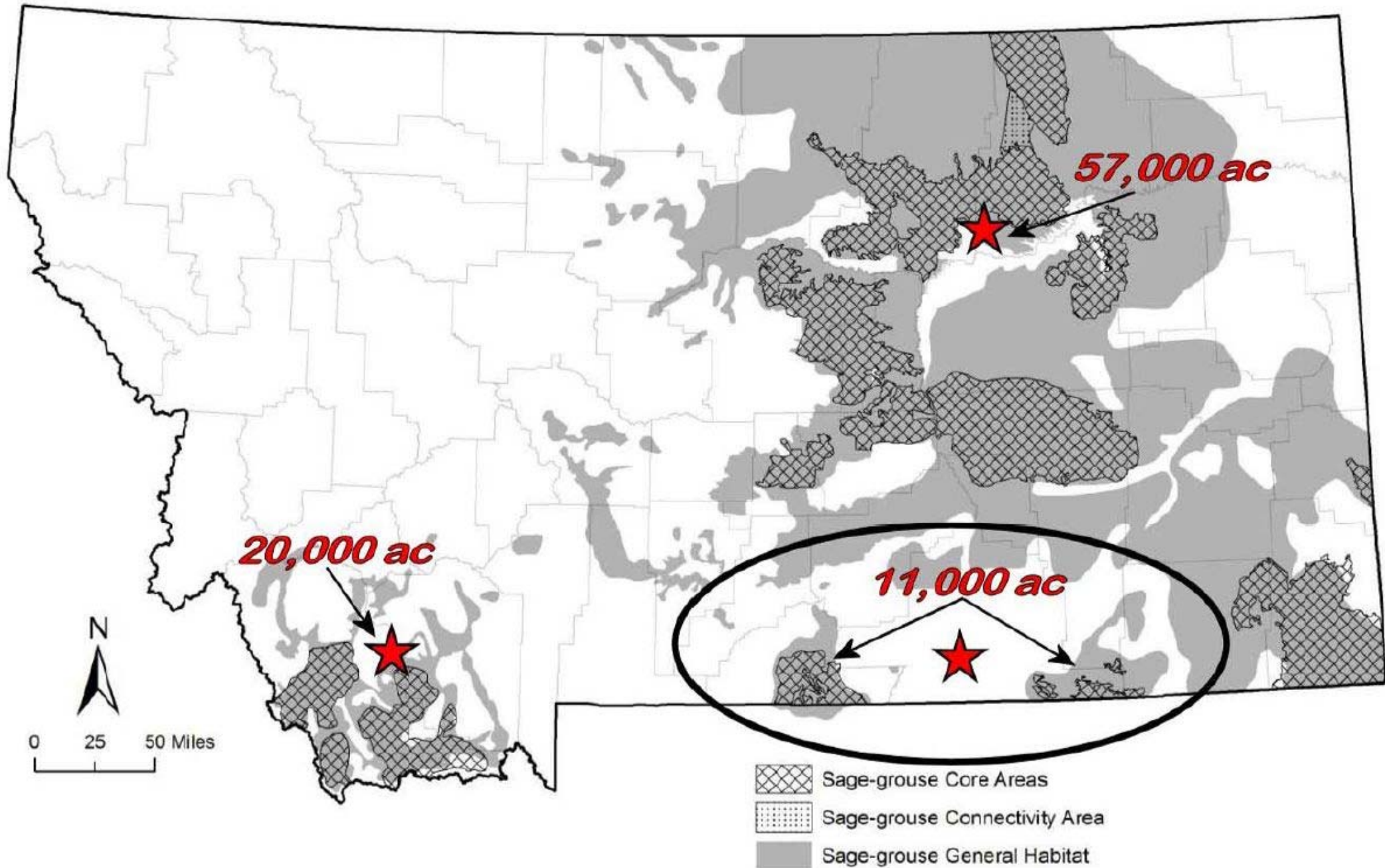
RESISTANCE TO THE NEW PARDIGM (BANK CREDITS):

- Agency personnel entrenched in philosophy to mitigate “on-site and in-kind”
- Environmental groups fearing the efficiencies of bank credits (via a financial transaction) makes development too easy
- Agency difficulties in implementing “equivalent standards” required by various statutes
- Transitioning away from historic “practices of necessity” when bank credits were not available (e.g. after-the-fact mitigation, fee payments to third parties for future conservation efforts)
- Consultants/designers concerns over loss of fees (clients purchasing mitigation credits rather than designing/implementing permittee responsible mitigation)

WETLAND/STREAM MITIGATION BANKS



SAGE GROUSE CONSERVATION BANKS



QUESTIONS

