

Planning for Perpetuity: Experience from 20 years of stewardship (in the context of mitigation)

Deborah L. Rogers

Center for Natural
Lands Management



In-Lieu Fee Mitigation
Training Webinar Series
July 31, 2013

CNLM Dana Point Preserve
Orange County, CA
Photo credit: D.L. Rogers

Center for Natural Lands Management



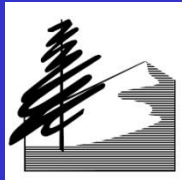
- Founded in 1990 as a 501(c)3 organization
- Preserves and Staff in CA and WA
- Endowments > \$50 million
- ~80 Preserves
- Fee title, Perpetual management contracts, Conservation Easements
- LTA accreditation



CNLM Prichard Lake Preserve
Sacramento, CA ©CNLM

Conservation/protection = $f(a + b + c) \rightarrow \infty$

Where:



- a = Appropriate land use restrictions
- b = Adequate and secure funding
- c = Science-based stewardship

CNLM Skunk Hollow Vernal Pool Preserve, Riverside County

Photo credit: K. Klementowski

Riverside fairy shrimp (*Streptocephalus woottoni*)



Management plans (and planning)

1. Information sources
2. Consider all roles (e.g., conservation easement?
Contract-heavy?)
3. Contingency planning
4. Requirements



Note: The California multi-agency Project Delivery Team developed this general outline to assist in the development of the Long-term Management Plan for mitigation banks.

Objectives and tasks are provided for illustrative purposes only and may not represent management requirements for a specific bank.

(Template Version Date: May 2008)

**Long-term Management Plan
For
The _____ Mitigation Bank**

I	Introduction	3
A	Purpose of Establishment.....	3
B	Purpose of this Long-term Management Plan	3
C	Land Manager and Responsibilities.....	3
II	Property Description	4
A	Setting and Location	4
B	History and Land Use	4
C	Cultural Resources – <i>(if applicable, refers to Cultural Resources Survey, Exhibit J in the BEI)</i> 4	
D	Hydrology and Topography.....	4
E	Soils.....	4
F	Existing Easements	4
G	Adjacent Land Uses	5
III	Habitat and Species Descriptions	5
A	Biological Resources Survey of Bank	5
B	Summary of Bank Development Plan <i>(if applicable)</i>	5
C	Endangered and Threatened Species	5
D	Rare Species and Species of Special Concern	5
IV	Management and Monitoring	6
A	Biological Resources	6
	Element A.1 Waters of the U.S., including wetlands	6
	Element A.2 Covered Species <i>(if applicable)</i>	7
	Element A.3. Covered Habitat <i>(if applicable)</i>	7
	Element A.4 Threatened/Endangered Plant Species Monitoring <i>(if applicable)</i>	7
	Element A.5 Threatened/Endangered Animal Species Monitoring <i>(if applicable)</i>	8
	Element A.6 Non-native Invasive Species.....	8

US Fish and Wildlife Service

Conservation Banks

Template for Long-term
Management Plan

[http://www.fws.gov/sacramento/
es/Conservation-
Banking/Home/es_conse-
banking.htm](http://www.fws.gov/sacramento/es/Conservation-Banking/Home/es_conse-banking.htm)

USFWS Template for Long-term Management Plan, cont.

Element A.7	Vegetation Management	9
B	Security, Safety, and Public Access	10
Element B.1	– Trash and trespass	10
Element B.2	– Fire Hazard Reduction	10
C	Infrastructure and Facilities	11
Element C.1	Fences and Gates	11
D	Reporting and Administration	11
Element D.1	– Annual Report	11
V	Transfer, Replacement, Amendments, and Notices	11
A	Transfer	11
B	Replacement	12
C	Amendments	12
D	Notices	12
VI	Funding and Task Prioritization	14
A	Funding	14
B	Task Prioritization	15
Table 1.	Bank Management and Monitoring Activities, Level of Effort, Frequency and Cost	16

Goals and Objectives

Clear, Reasonable, Appropriate, Measureable

Examples

Goal: Protect waters of the US

Objective: To maintain current water level, quality, and amount of wetland habitat in perpetuity

Objective: To maintain current level of biodiversity in wetland habitat

Objective: To support natural processes in a wetland community so that the need for artificial support is minimized

Objective: To provide adequate habitat for native wetland species, particularly those that are rare, sensitive, or threatened

Indicators of Good Management Plans

1. Goals and objectives are clearly stated, reasonable, appropriate, and measureable.
2. All agency requirements pertaining to management, monitoring, and reporting are described.

3. Provides all the essential preserve information needed by the next preserve manager.
4. Is consistent with all related legal documents (e.g., conservation easement, management and funding agreement, etc.).
5. Focuses on the specific history, features, conservation values, and threats of the preserve.
6. Contains an analysis and interpretation of data collected to date on that preserve or on preserves that have some similar features.

7. Input to annual work plans can be easily gleaned.
8. Provides not only management direction but rationale for tools chosen.
9. Discusses contingencies for high-risk actions or unstable conditions.
10. Consistent with and references all [CNLM] guidance documents.

CNLM Preserve Stewardship Policy (155-09)

For the purposes of this policy, stewardship is defined as the wise use, management, and protection of the physical, ecological, and financial resources associated with conservation lands.

Policy

For all resources over which Center has long-term stewardship responsibilities, whether by ownership or contract, Center will provide stewardship consistent with its contractual obligations that:

- (a) Supports and enhances the long-term sustainability of the resource;
- (b) Focuses on conservation of native species and ecosystem function;
- (c) Uses scientific literature and principles to inform practices;
- (d) Adjusts practices appropriately in response to new information and experience gained over time (“adaptive management”); and
- (e) Recognizes the influence of the larger spatial contexts (for example, watershed, ecoregion or species range) and temporal contexts (including rapid climate/sea level change).

Built to last?



1947 Cockshutt Tractor; Restored by R. Rogers; June 2012

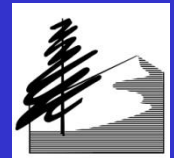
Trends that Affect CNLM Preserves:

Recreation pressure



“Off-Highway Vehicular (OHV) use is on the rise. The last 15 years have seen a 1,300 percent increase in SUV street legal 4x4 sales. In the past 5 years, there has been an 85 percent increase in registrations of dirt bikes, and an 87 percent increase in all-terrain vehicle registrations. With the rapidly growing urbanization of California, OHV enthusiasts have fewer places to recreate, while the demand is continuing to grow.”

(California Biodiversity Council, 2007)

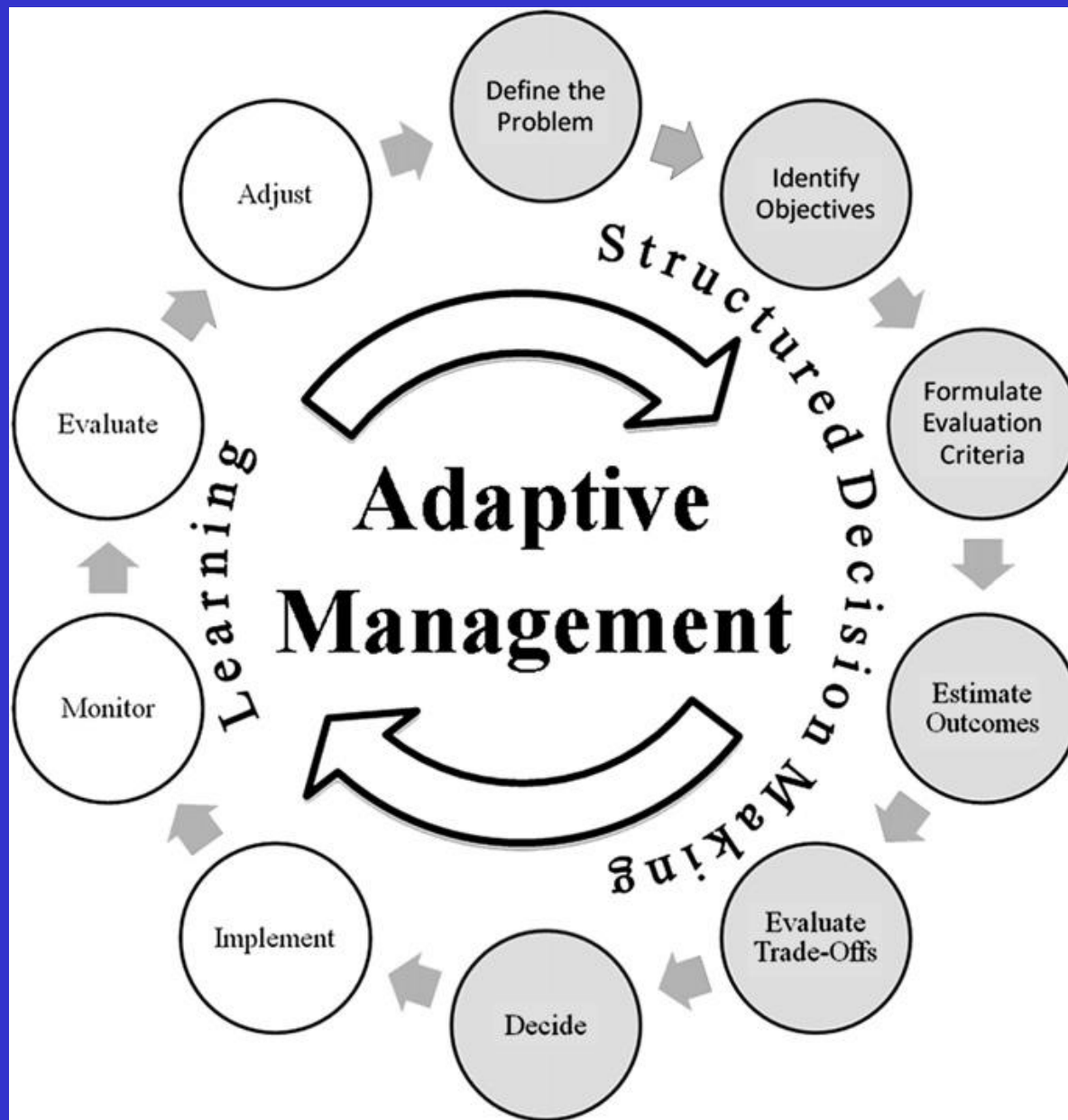


Rapid Climate Change – Impacts on (CNLM) Preserves

- Increased use of preserves as natural refugia (new species)
- Migrations and extirpations (loss of species)
- Changes in hydrological context
- Increased requests to use preserves as translocation sites
- Increased incidence of exotic invasives
- Possibly new hybridizations
- Possibly habitat conversion
- New selection pressures
- Uncertainty

CNLM and Rapid Climate Change: Preparations

- Attentiveness to costs for vegetation management and consideration of other exotics in budget preparation
- Consideration to increased contingency rate in PARs
- Investment in professional development of preserve staff
- Increased attention to preserve design, especially preserve size, connectivity, and buffers
- Investment in development of policies relating to genetic contamination and translocations
- Increased investment in relationships with research community
- Adaptive management



Allen, C.R., J.J. Fontaine, K.L. Pope, and A.S. Garmestani. 2011. Adaptive management for a turbulent future. *J. Env. Mgt.* 92: 1339-1345.

Preparing for Adaptive Management

- **Staff: professional development, transition**
- **Documentation: tools, protocols, institutional memory**
- **Institutional stability**
- **Monitoring**
- **Relationship development**

Funding Perpetual Stewardship Obligations

There is no 'perfect' cost analysis

The driving principle behind the PAR process for cost analysis is that every preserve is unique and that a 'ground up' approach is best for cost construction

The cost analysis (e.g., "PAR") is just the beginning: Ongoing stewardship of the natural resources must be accompanied by ongoing stewardship of the financial resources

The "draw-down rate" is not a prudent "spend rate"

Perpetuity lasts ... a long time

ROGERS, D.L. 2012. Preparing for Perpetuity: Decision-support for calculating the perpetual costs of stewardship. Pp 128-9 *In* Wetland and Stream Mitigation: A Handbook for Land Trusts. Environmental Law Institute and Land Trust Alliance, September 2012.

Box 11: Preparing for Perpetuity - Decision-Support for Calculating the Perpetual Costs of Stewardship

The Center for Natural Lands Management (CNLM) has developed a due diligence process and software that provide a structure for detailed and objective determination of perpetual stewardship costs. Called the “PAR[®]” (for Property Analysis Record), the software asks for detailed information on the acquisition transaction, conservation values and stewardship tasks, and financial parameters. Together, with the due diligence process, the PAR software provides an estimate of stewardship costs that are also parlayed into an appropriate long-term stewardship amount. The product then provides a detailed and transparent justification for the long-term stewardship fund figure, allowing discussion and revision or negotiation, as appropriate, among the interested parties.

The PAR process and software reflect four fundamental features of rigorous cost determination for perpetual stewardship:

Conservation/protection = $f(a + b + c) \rightarrow \infty$

Where:



a = Appropriate land use restrictions

b = Adequate and secure funding

c = Science-based stewardship



Riparian Brush Rabbit
CNLM Oxbow Preserve
San Joaquin County, CA

