Long Term Management for Mitigation: Part II

March 4, 2025 – 3pm ET

National Association of Wetland Managers Hot Topics

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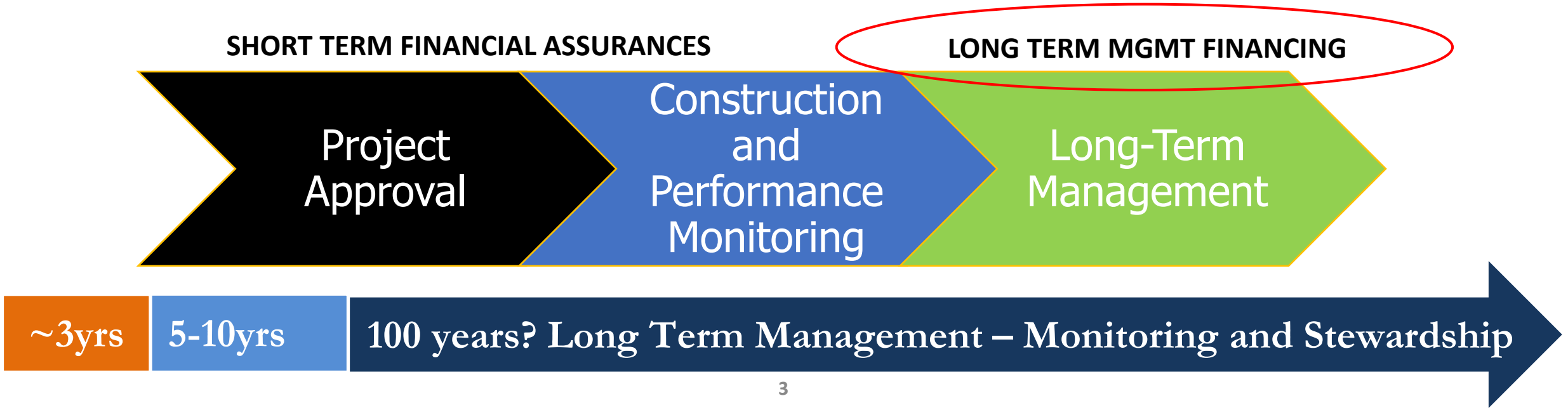
Ecological Restoration Business Association

- Advocacy organization.
- ERBA's mission is to support private investment in durable environmental results that enable responsible economic growth.
- ERBA members provide compensatory mitigation for impacts to wetlands and waters of the U.S. & other offsets.
- ~80 member companies operating across geographies.

Scope of Today's Webinar

- Importance of best (and often, essential) practices
  - Industry – sponsors and regulators - maturity after years of trial and error and observations
- Part II (Today): Focus on financing mechanisms/models, considerations, funding determinations, and reflections on challenges and limitations
- *Note that LTM is distinct from the short-term FAs early in the project*
  - *See December 2021 webinars for overview of short-term FA content*



Part I Recap: why, who, what, how

- Why Long Term Management (LTM)?
  - Even with great site selection, must prepare for the unknown
  - Critical to enduring success of regulatory program, industry reputation, actual resource recovery

- What is LTM?
  - Site protection instrument, adaptive mgmt. plan, Site self-sustainability elements, LTM plan

- 2008 Rule (33 CFR 332.7(d))
  - Mechanism may include endowments, trusts, contractual arrangements, or other mechanisms

- USFWS Mitigation Policy
  - 5(g) Durability, 6.6.3.1. Equivalent Standards (j)
- USFWS CMP
  - 5.4 Additionality, 7.1 Habitat Based Mechanisms

From Part 1: Long-Term Management Plans

Cattle Grazing Mitigation Bank Wetlands

Technical-Ecological Components

- ✓Site Purpose, Attributes & Resources
- ✓Property and Resource Descriptions
- ✓Management Personnel and Responsibilities
- ✓Plan Goals/Objectives
- ✓**Monitoring and Analysis**
- ✓**Management Activities**
- ✓Remediation/Restoration Activities

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From Part 1: Long-Term Management Plan Contents

Administrative Components

- ✓Recreation & Education
- ✓Agency Notification
- ✓***Long Term Maintenance of Structures/ Improvements***
- ✓Prohibited Activities
- ✓**Bank Inspections and Reporting**
- ✓Endowment Funding/spend plan
- ✓***Security, Safety, Access***
- ✓Plan Amendment

Determining management costs method: the manual method

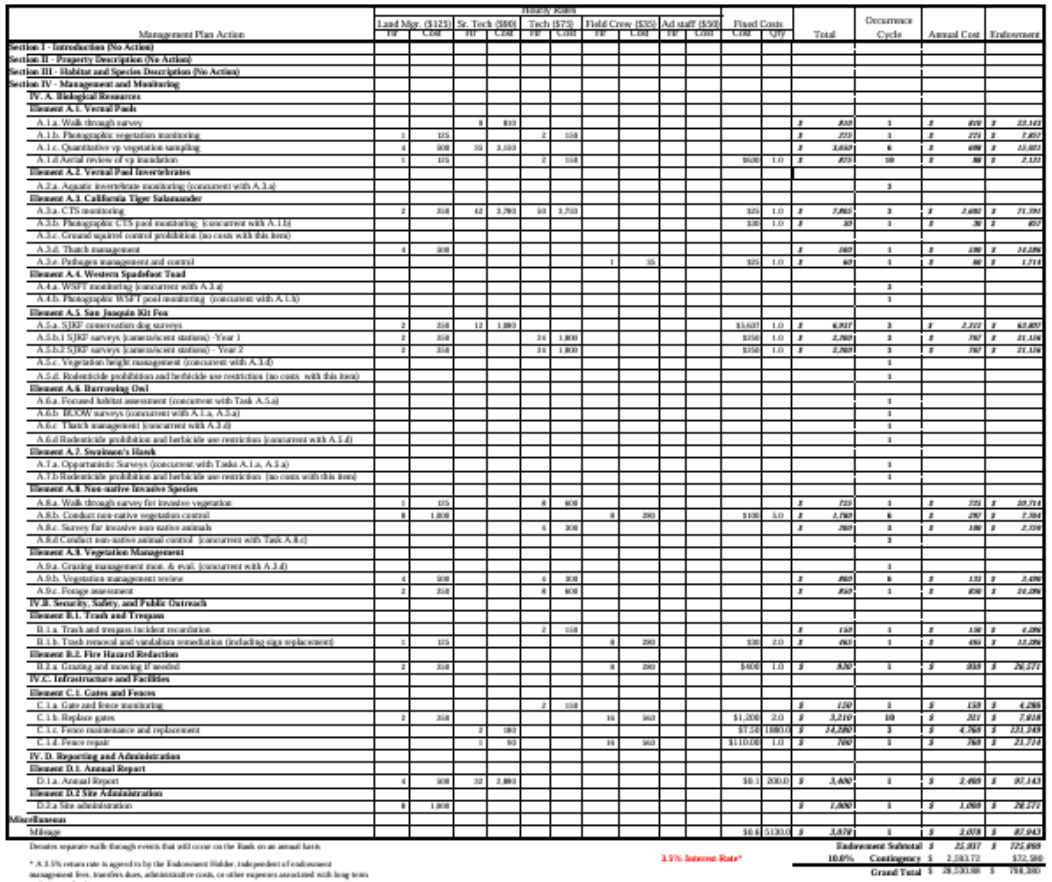
Plan Goals and Objectives

Task Management - Scope

Cost Estimate

Management Plan

Estimated Costs



Management Plan Action	Property Tasks: Land Mgr. ($123) TH	Land Mgr. ($123) COST	Sr. Tech ($84) TH	Sr. Tech ($84) COST	Tech ($72) TH	Tech ($72) COST	Field Crew ($35) TH	Field Crew ($35) COST	Ad staff ($50) TH	Ad staff ($50) COST	Fixed Costs COST	Fixed Costs QTY	Total	Occurrence Cycle	Annual Cost	Endowment
Section I - Introduction (No Action)																
Section II - Property Description (No Action)																
Section III - Habitat and Species Description (No Action)																
Section IV - Management and Monitoring																
IV. A. Biological Resources																
Element A.1. Vernal Pools																
A.1.a. Walk through survey			8	$ 840									$ 840	1	$ 840	$ 22,343
A.1.b. Photographic vegetation monitoring	3	$ 369			8	$ 568							$ 273	1	$ 273	$ 7,057
A.1.c. Quantitative vp vegetation sampling	8	$ 968	56	$ 3,920									$ 4,848	6	$ 698	$ 18,483
A.1.d Aerial review of vp inundation	0	$ 0			2	$ 144					$ 648	1.0	$ 853	10	$ 85	$ 2,321
Element A.2. Vernal Pool Invertebrates																
A.2.a. Aquatic invertebrate monitoring (concurrent with A.3.a)														3		
Element A.3. California Tiger Salamander																
A.3.a. CTS monitoring	2	$ 246	42	$ 2,940	10	$ 720					$ 315	1.0	$ 3,921	3	$ 2,692	$ 71,190
A.3.b. Photographic CTS pool monitoring (concurrent with A.1.b)											$ 35	1.0	$ 35	1	$ 35	$ 857
A.3.c. Ground squirrel control prohibition (no costs with this item)																
A.3.d. Thatch management	4	$ 492											$ 492	1	$ 492	$ 14,196
A.3.e. Pathogen management and control							1	$ 35			$ 35	1.0	$ 69	1	$ 69	$ 1,714
Element A.4. Western Spadefoot Toad																
A.4.a. WSFT monitoring (concurrent with A.3.a)														3		
A.4.b. Photographic WSFT pool monitoring (concurrent with A.1.b)														3		
Element A.5. San Joaquin Kit Fox																
A.5.a. SJKF conservation dog surveys	2	$ 246	12	$ 840							$ 3,607	1.0	$ 4,933	3	$ 2,222	$ 63,892
A.5.b.1 SJKF surveys (camera/scent stations) - Year 1	2	$ 246			16	$ 1,800					$ 350	1.0	$ 2,395	3	$ 797	$ 21,336
A.5.b.2 SJKF surveys (camera/scent stations) - Year 2	2	$ 246			16	$ 1,800					$ 350	1.0	$ 2,395	3	$ 797	$ 21,336
A.5.c. Vegetation height management (concurrent with A.1.d)														1		
A.5.d. Rodenticide prohibition and herbicide use restriction (no costs with this item)														1		
Element A.6. Burrowing Owl																
A.6.a. Focused habitat assessment (concurrent with Task A.5.a)														1		
A.6.b. BUOW surveys (concurrent with A.1.a, A.2.a)														1		
A.6.c. Thatch management (concurrent with A.2.d)														1		
A.6.d Rodenticide prohibition and herbicide use restriction (concurrent with A.5.d)														1		
Element A.7. Swainson's Hawk																
A.7.a. Opportunistic Surveys (concurrent with Tasks A.1.a, A.5.a)														1		
A.7.b Rodenticide prohibition and herbicide use restriction (no costs with this item)														1		
Element A.8. Non-native Invasive Species																
A.8.a. Walk through survey for invasive vegetation	1	$ 123			8	$ 568							$ 723	1	$ 723	$ 18,714
A.8.b. Conduct non-native vegetation control	8	$ 1,968					8	$ 280			$ 350	5.0	$ 2,598	6	$ 397	$ 10,304
A.8.c. Survey for invasive non-native animals					6	$ 504							$ 504	3	$ 168	$ 4,359
A.8.d Conduct non-native animal control (concurrent with Task A.8.c)														3		
Element A.9. Vegetation Management																
A.9.a. Grazing management mon. & eval. (concurrent with A.2.d)														3		
A.9.b. Vegetation management review	4	$ 492			6	$ 504							$ 996	6	$ 151	$ 3,896
A.9.c. Forage assessment	2	$ 246			8	$ 608							$ 854	3	$ 456	$ 11,796
IV.B. Security, Safety, and Public Outreach																
Element B.1. Trash and Trespass																
B.1.a. Trash and trespass incident recordation					2	$ 144							$ 144	1	$ 144	$ 4,286
B.1.b. Trash removal and vandalism remediation (including sign replacement)	1	$ 123					8	$ 280			$ 350	2.0	$ 753	3	$ 251	$ 6,486
Element B.2. Fire Hazard Reduction																
B.2.a. Grazing and mowing if needed	2	$ 246					8	$ 280			$ 420	1.0	$ 946	3	$ 315	$ 20,377
IV.C. Infrastructure and Facilities																
Element C.1. Gates and Fences																
C.1.a. Gate and fence monitoring					2	$ 144							$ 144	1	$ 144	$ 4,286
C.1.b. Replace gates	2	$ 246					16	$ 560			$ 1,200	2.0	$ 3,210	10	$ 321	$ 7,918
C.1.c. Fence maintenance and replacement			2	$ 168							$ 7,500	1000.0	$ 14,280	3	$ 4,760	$ 121,249
C.1.d. Fence repair			1	$ 84			16	$ 560			$ 110,000	1.0	$ 760	1	$ 760	$ 21,714
IV. D. Reporting and Administration																
Element D.1. Annual Report																
D.1.a. Annual Report	4	$ 492	32	$ 2,880							$ 0.1	200.0	$ 3,400	1	$ 2,468	$ 97,143
Element D.2 Site Administration																
D.2.a Site administration	8	$ 1,968											$ 1,968	1	$ 1,968	$ 28,377
Miscellaneous																
Mileage											$ 0.4	5130.0	$ 3,078	1	$ 2,078	$ 87,943
															Endowment Subtotal	$ 725,969
														10.0%	**Contingency**	$ 372,586
															Grand Total	$ 4,100,555

Denotes separate each through events that will occur on the Bank on an annual basis.

* A 3.5% return rate is agreed to by the Endowment Holder, independent of endowment management fees, transfers fees, administrative costs, or other expenses associated with long-term endowment fund management.

3.5% Interest Rate*

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Cost estimation example: Routine Fence Repair

Dutchman Creek Conservation Bank fencing objective:

Element C.1 from LTMP:

"Monitor and maintain fencing and gates to ***prevent casual trespass***, allow necessary access, and, if necessary, facilitate grazing regime and management."

Wooden fence posts and fire don't mix

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Dutchman Creek Conservation Bank fencing tasks:

Objective:

"Monitor and maintain fencing and gates to prevent casual trespass, allow necessary access, and, if necessary, facilitate grazing regime and management."

Task C.1.a Record condition each visit…

Task C.1.b Replace gates…

Task C.1.c Replace fence…

Task C.1.d Fence and gate repairs and associated sign replacement will be performed on 264 linear feet of fence each year…

Dutchman Creek Conservation Bank fencing task costing:

Management Plan Action
Element C.1. Gates and Fences
C.1.d Fence repair

Hourly Rates				Fixed Costs		Total	Occurrence Cycle	Annual Cost
Sr. Tech ($90)		Field Crew ($35)						
1 hr	90	16 hr	560	$110.00	1.0	$760	1	$760

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Task C.1.d assumptions:

- **Fixed materials** cost include 1 roll of barbed wire which will provide approximately 250 ft of 5 strand fencing plus 11 T-posts and clips and a no trespassing sign
- **16 hours** allocated of fence repair and/or maintenance by field crew staff (i.e. 2 person @ 8 hrs. each, including travel) each year
- **1 hour** has been allocated for Sr. Tech time to review fence replacement while in-office to minimize effects to special status species, based on data collected in Task C.1.a

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How do we estimate or validate costs?

- RS Means Construction Costs Software
  (rsmeans.com)
- CNLM Property Analysis Record (PAR)
  (CNLM.org/par/)
- TNC Stewardship Calculator
  (conservationgateway.org/ConservationPlanning/ToolsData/Pages/stewardshipcalculator)
- NRCS Conservation Practices (via local NRCS offices)
- Local data (Neighbors)

Source: Tractor Supply Co.

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How the "Cap" or "Spend Rate" affects Initial Funding Amt

Hourly Rates				Fixed Costs		Total	Occurrence Cycle	Annual Cost
Sr. Tech ($90)		Field Crew ($35)						
1 hr	90	16 hr	560	$110.00	1.0	$760	1	$760

- Annual cost / Cap (Spend) Rate = Funding Amount (contribution to total fund principal)
- 4.5% Cap (Spend) rate: $760/.045 = $16, 889
- 4% Cap (Spend) rate: $760/.04 = $19,000
- 3.5% Cap (Spend) rate: $760/.035 = $21,714

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The Bottom Line

D.2 Endowment Fund and Security
Dutchman Creek Conservation Bank

Management Plan Action	Hourly Rates: Land Mgr. ($125) Hr	Land Mgr. ($125) Cost	Sr. Tech ($80) Hr	Sr. Tech ($80) Cost	Tech ($75) Hr	Tech ($75) Cost	Field Crew ($35) Hr	Field Crew ($35) Cost	Ad staff ($50) Hr	Ad staff ($50) Cost	Fixed Costs Cost	Fixed Costs Qty	Total	Occurrence Cycle	Annual Cost	Endowment
Section I - Introduction (No Action)																
Section II - Property Description (No Action)																
Section III - Habitat and Species Description (No Action)																
Section IV - Management and Monitoring																
IV. A. Biological Resources																
Element A.1. Vernal Pools																
A.1.a. Walk through survey			8	810									$ 810	1	$ 810	$ 22,143
A.1.b. Photographic vegetation monitoring	1	135			2	150							$ 285	1	$ 285	$ 7,850
A.1.c. Quantitative vp vegetation sampling	4	500	35	3,150									$ 3,650	6	$ 608	$ 16,621
A.1.d Aerial review of vp inundation	1	135			2	150					$630	1.0	$ 815	10	$ 80	$ 2,185
Element A.2. Vernal Pool Invertebrates																
A.2.a. Aquatic invertebrate monitoring (concurrent with A.2.a)														3		
Element A.3. California Tiger Salamander																
A.3.a. CTS monitoring	2	250	42	3,780	50	3,750					$25	1.0	$ 7,805	3	$ 2,602	$ 71,150
A.3.b. Photographic CTS pool monitoring (concurrent with A.1.b)											$30	1.0	$ 30	1	$ 30	$ 820
A.3.c. Ground squirrel control prohibition (no costs with this item)																
A.3.d. Thatch management	4	500											$ 500	1	$ 500	$ 14,206
A.3.e. Pathogen management and control							1	35			$25	1.0	$ 60	1	$ 60	$ 1,714
Element A.4. Western Spadefoot Toad																
A.4.a. WSFT monitoring (concurrent with A.2.a)														3		
A.4.b. Photographic WSFT pool monitoring (concurrent with A.1.b)														1		
Element A.5. San Joaquin Kit Fox																
A.5.a. SJKF conservation dog surveys	2	250	12	1,080							$5,607	1.0	$ 6,937	3	$ 2,312	$ 65,897
A.5.b.1 SJKF surveys (camera/scent stations) -Year 1	2	250			24	1,800					$356	1.0	$ 2,380	3	$ 793	$ 21,336
A.5.b.2 SJKF surveys (camera/scent stations) - Year 2	2	250			24	1,800					$356	1.0	$ 2,380	3	$ 793	$ 21,336
A.5.c. Vegetation height management (concurrent with A.3.d)														1		
A.5.d. Rodenticide prohibition and herbicide use restriction (no costs with this item)														1		
Element A.6. Burrowing Owl																
A.6.a. Focused habitat assessment (concurrent with Task A.5.a)														1		
A.6.b BUOW surveys (concurrent with A.1.a, A.5.a)														1		
A.6.c Thatch management (concurrent with A.3.d)														1		
A.6.d Rodenticide prohibition and herbicide use restriction (concurrent with A.5.d)														1		
Element A.7. Swainson's Hawk																
A.7.a. Opportunistic Surveys (concurrent with Tasks A.1.a, A.5.a)														1		
A.7.b Rodenticide prohibition and herbicide use restriction (no costs with this item)														1		
Element A.8. Non-native Invasive Species																
A.8.a. Walk through survey for invasive vegetation	1	125			8	600							$ 725	1	$ 725	$ 20,514
A.8.b. Conduct non-native vegetation control	8	1,000					8	280			$130	5.0	$ 1,780	6	$ 297	$ 7,504
A.8.c. Survey for invasive non-native animals					4	300							$ 300	3	$ 100	$ 2,538
														3		
														1		
		500			4	300							$ 800	6	$ 133	$ 3,376
		250			8	600							$ 850	1	$ 850	$ 24,056
					2	150							$ 150	1	$ 150	$ 4,250
							8	280			$30	2.0	$ 490	1	$ 490	$ 13,856
		250					8	280			$400	1.0	$ 930	1	$ 930	$ 26,271
C.1.a. Gate and fence monitoring					2	150							$ 150	1	$ 150	$ 4,250
C.1.b. Replace gates	2	250									$1,200	2.0	$ 3,250	10	$ 325	$ 9,018
C.1.c. Fence maintenance and replacement			2	160							$750	1000.0	$ 14,390	3	$ 4,760	$ 133,345
C.1.d. Fence repair			1	80			10	560			$50	1.0	$ 700	1	$ 700	$ 21,710
IV. D. Reporting and Administration																
Element D.1. Annual Report																
D.1.a. Annual Report	4	500	32	2,880							$0.1	2.0	$ 3,380	1	$ 3,380	$ 97,143
Element D.2 Site Administration																
D.2.a Site administration	8	1,000											$ 1,000		$ 1,000	$ 28,571
Miscellaneous																
Mileage											$0.6	5130.0	$ 3,078	1	$ 3,078	$ 87,943
															Endowment Subtotal	$ 725,860
															10.0% Contingency	$ 72,586
															Grand Total	$ 798,446

Denotes separate walk through events that will occur on the Bank on an annual basis.

* A 3.5% return rate is agreed to by the Endowment Holder, independent of endowment management fees, transfers dues, administrative costs, or other expenses associated with long term endowment fund management.

3.5% Interest Rate*

Total Estimated Annual Management Cost = $25,937
Assuming a 3.5% Cap(Spend) rate

Total Endowment Principal= $25,937/.035= **$741,057**

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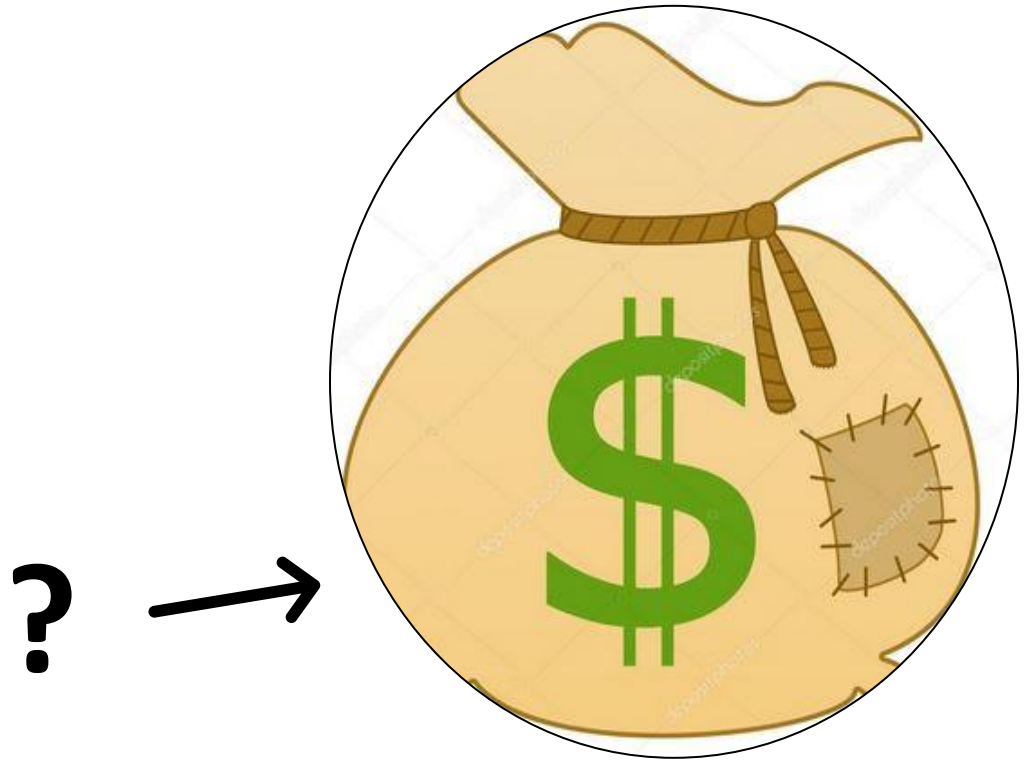
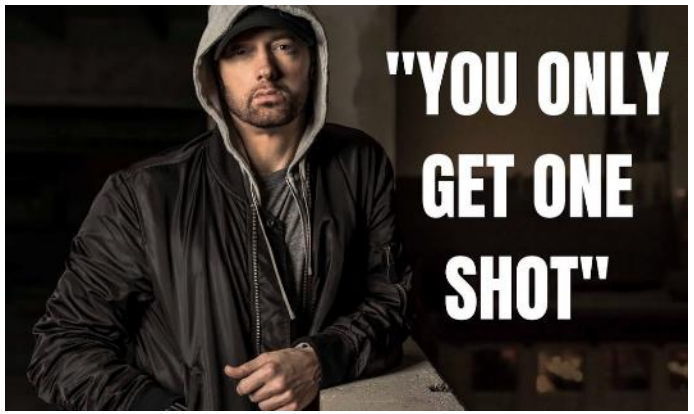
Establishing the Fund:

- We now know the Fund size.
- **Who** pays?
- **How** do they pay it?
- **When** do they pay it?



- **Who pays?** Ultimately, the permittee
- **How & When?** There are options. But, regardless of the funding mechanism…



To lock in those details!

- That opportunity is during the development of the bank/ILF instrument or PRM mitigation plan

Approaches used to fund LTM include:

1. Lump sum payments
2. Credit sale proceeds
3. Schedule of payments
4. Rollover of contingency funds
5. Annual program budgets or appropriations
6. Programmatic agreements

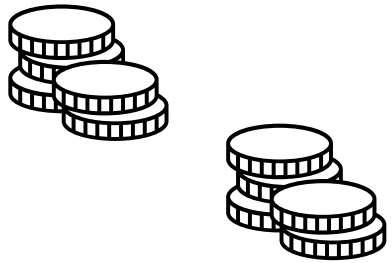
Approaches for funding LTM:

1. Lump sum payment
   - Single payment of principal amount needed
   - Typically funded in advance of project implementation
   - May be associated with single user (government) projects

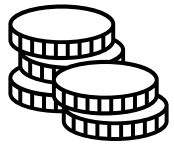
Advantages
- Easy to verify
- Eliminates risk that LTM will not be fully funded
- Allows fund to start building immediately

Disadvantages
- May require large amount of money prior to revenue
- Will impact rate of return and inhibit future investment

Approaches for funding LTM:



2. Proceeds from credit sales
    - Incremental funding from a portion of each credit sale
    - Deposited in an account (escrow or endowment)
    - Based on a percentage of purchase price or specific dollar amount per credit



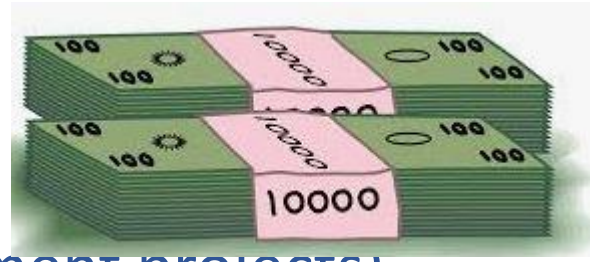
Advantages

- Avoids need to generate large cash deposits
- Facilitates a reasonable return on investment

Disadvantages

- More difficult to track payments
- When based on % of credit sale proceeds, risk of underfunding if prices are weak, sales are poor, or bankruptcy
- Risk that deposits will not be completed if credit sales falter

Approaches for funding LTM:



3. Schedule of payments
   - Incremental funding over a number of years
   - Annual payments/annual appropriations (government projects)

Advantages
- More practical "progress payments"
- Can help agencies manage risk if tied to credit releases

Disadvantages
- Delays in funding possible, especially if not tied to credit releases – e.g., annual payments from governmental budgets

Notes
- Some require full funding by some date after approval of the instrument or plan
- Some require full funding prior to final credit release

Example of payment schedule (CA BEI Template 2021)

Credit Release	Performance Milestone	Interim	Total
1	MBI approval Easement recorded Financial Assurance Executed ***Endowment Established***	**15%**	**15%**
2	Construction Complete ***30% endowment principal funded***	**25%**	**40%**
3	Year 2 Performance Stds Achieved ***55% endowment principal funded***	**15%**	**55%**
4	Year 3 Performance Std. Achieved ***70% endowment principal funded***	**15%**	**70%**
5	Year 4 Performance Stds Achieved Delineation submitted ***100% endowment principal funded***	**15%**	**85%**
6	Year 5 Performance Stds Achieved Verified JD	**15%**	**100%**

Approaches for funding LTM:

4. Rollover of contingency funds
    - Example:
        ILF contingency funds (20-30% of construction costs) rolled into stewardship once performance standards met

Considerations
- Itemized costs
- Ensuring sufficient funds for LTM
- Draw on funds may be immediate – little time for funds to generate earnings

Approaches for funding LTM:

5. Annual appropriations/annual budgets
   - State government (single user) banks and projects
   - Obligations funded either through appropriations or annual budgets

Considerations:
   - Proven effective in some states
   - Only if not feasible to allocate principal for LTM at time of project funding
   - May mean annual request to legislature or ensuring annual needs are in budget
   - Risk of reduced funding when revenues are constrained/competing demands for funds

Approaches for funding LTM:

6. Programmatic agreements
    - Typically for state (single-user) banks or projects
    - Agreement between state agency and Corps on long-term management i.e. utilizing maintenance funds for LTM

Considerations:
    - No evidence that states have failed to fulfill obligations
    - Risk of reduced funding when revenues are constrained or competing demands for funds

Mechanisms for managing and disbursing LTM funds:

Annuities

Short-term Financial Assurances

Contractual arrangements with responsible parties

Escrow agreements

Trusts and Endowments

Key questions:

- Feasible?
- Cost to the Sponsor/Provider?
- Adequate for LTM?

Mechanisms for managing LTM funds:

Annuity – type of lump sum payment

- Purchaser makes single payment
- Premium paid back to the purchaser over time

Considerations

- May not be transferable
- In low interest periods payout may not keep pace with inflation

Caution - Risks

Mechanisms for managing LTM funds:

Claim on short-term financial assurances

- Letter of credit, performance bonds, casualty insurance to fund LTM
- Accessible if the Sponsor (as Long-term Manager) defaults on LTM Plan
- Proceeds of claim go to Stand-by Trust

Considerations

- Not transferable
- Tracking expiration & renewal of mechanism (1, 2, 10 years) is critical
- Claim must be made to secure funds
- Annual adjustment of amount to reflect inflation

Caution - Risks

Mechanisms for managing LTM funds:

Contractual arrangements

- Responsible parties agree to pay for LTM
- Examples include
  - Contracts between Single User banks and LTM Steward for management
  - Leases of bank by Sponsor/Landowner to another party (i.e. Hunt Club) where lessee is responsible for management

Considerations – *Risks*

- Periodic renewal
- Monitoring condition of project site
- Vetting contractor/lessee
- Changing contractor/lessee

Escrow

- Under written agreement escrow agent holds entities' property as caretaker until completion of transaction
- Escrow agent has fiduciary duty to parties signing agreement
- Escrow agreement provides terms of escrow
- Escrow agents do not need financial management or investment experience

Escrow Agreements

- Can be used for mitigation financial assurance
- But some issues:
  - Escrow agent may not have investment experience or wherewithal
  - Escrow agent charges fee for escrow services
  - May invest in lower yielding simpler accounts
  - Lower investment yield may require greater deposit from mitigation provider
  - Lower yield could cause initial principal to be insufficient or require supplemental deposits over time

Trusts

- Agreement where trustee holds & manages funds provided by grantor for beneficiary
- In mitigation financial assurance:
  - Trustee - typically a financial bank or other licensed financial institution
  - Grantor - mitigation provider (i.e., mitigation bank sponsor)
  - Beneficiary - long term management entity, Corps, or state agency
- Financial bank as trustee provides opportunity for fund management & investment experience
- Suited for situations involving many years of fund management and proceeds disbursement

Trusts

- Considerations:
  - Financial banks charge fees for trust management – paid either directly by mitigation provider or from trust
  - Financial banks may refuse trusts for smaller long term management dollars
  - Financial banks may provide limited list of investment fund options for grantor to select to avoid trust mismanagement liability
  - Financial banks may be unfamiliar with using trusts to provide mitigation long term management financial assurance
  - Establishing capitalization amount to account for trust management fees & effects of inflation

Gunster

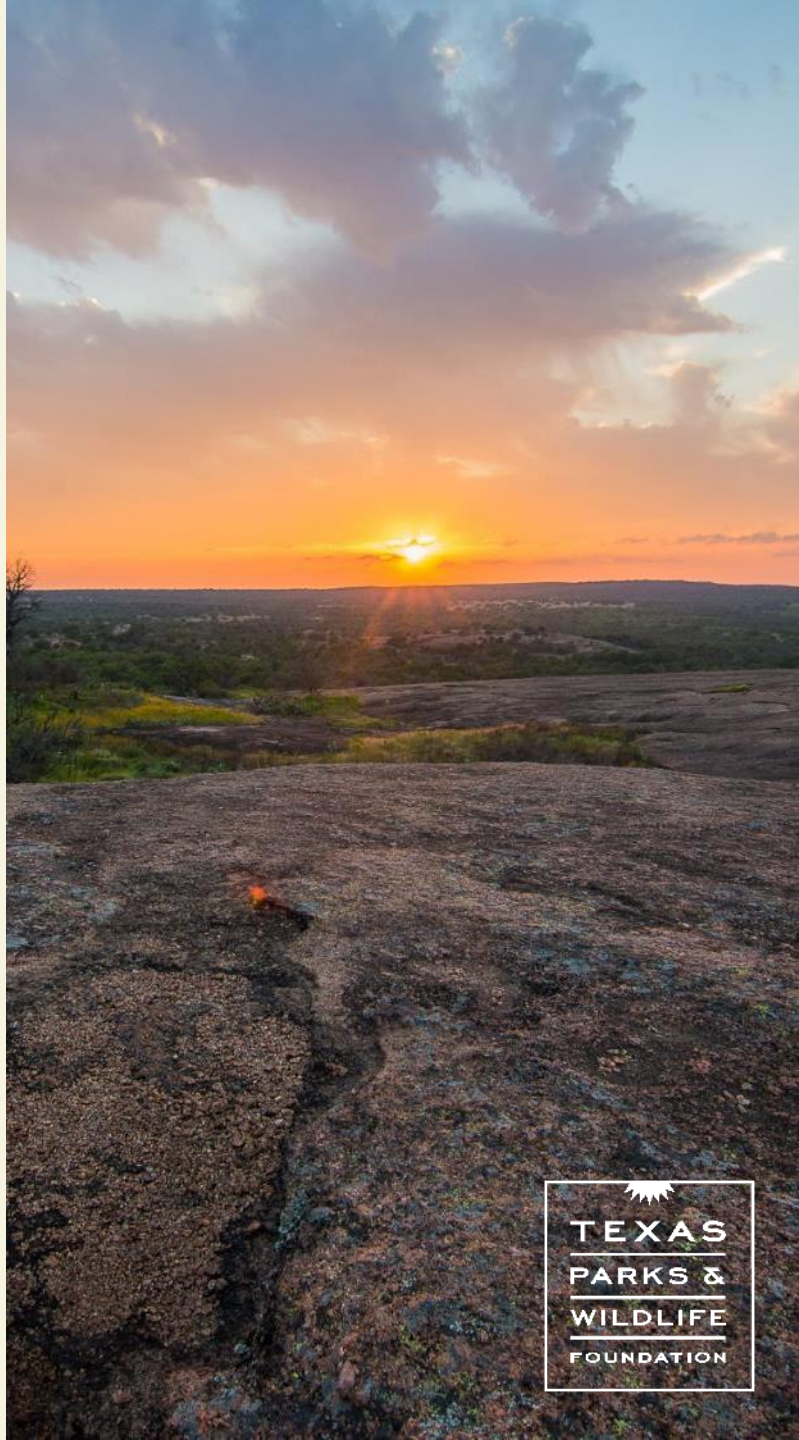
About Us

For over 30 years Texas Parks and Wildlife Foundation has been conserving the wild things and wild places of Texas.

Raised and invested more than $275 million to advance Texas' proud outdoor traditions and conserve and enhance our lands, waters, and wildlife.

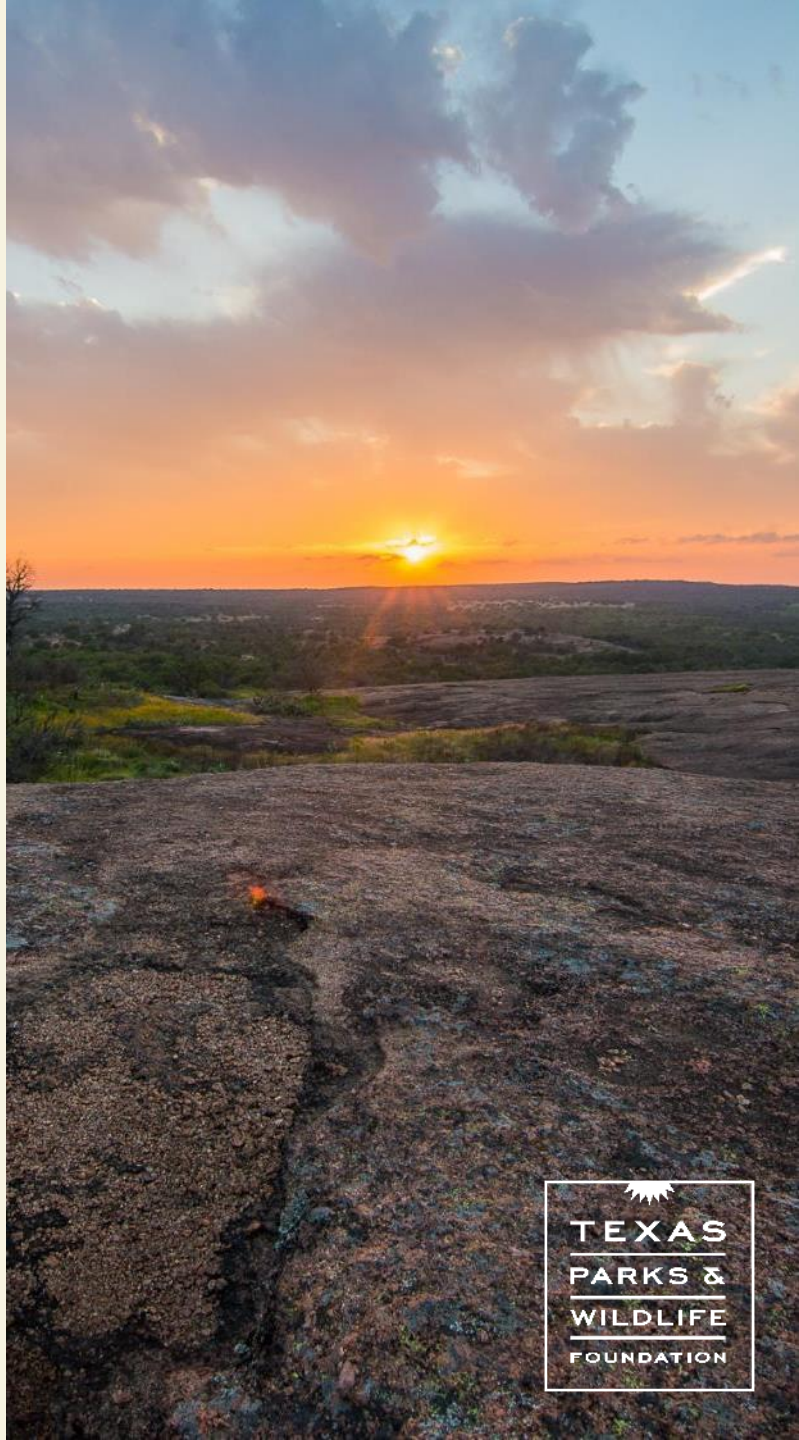
Provide direct support to Texas Parks and Wildlife Department and grants to conservation partners across the state.

Geographic focus is Texas – we will hold mitigation bank endowments for sites in OK and LA with a watershed or species nexus



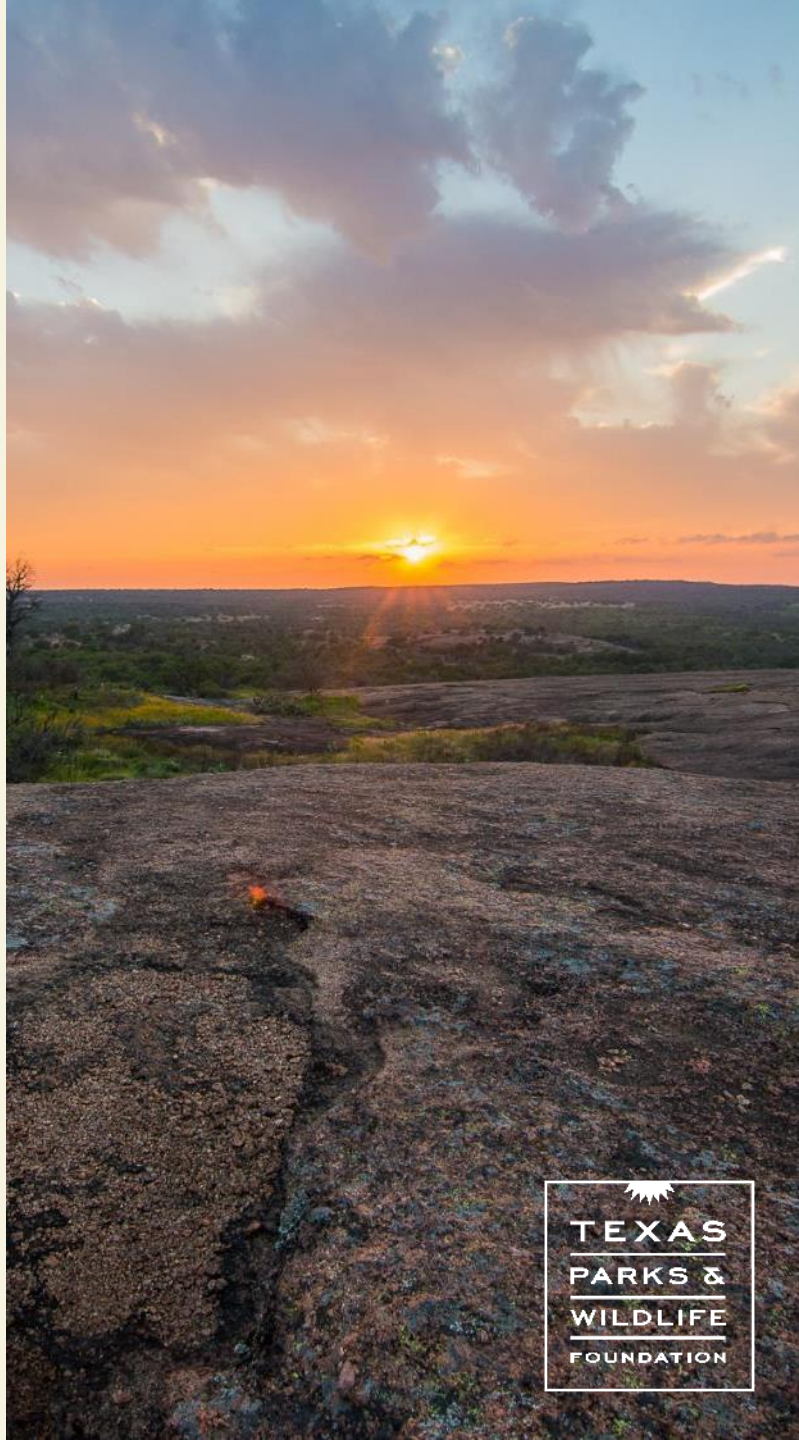
About Us: By the Numbers

- $75 million in liquid assets
  - Endowments
  - Long Term Funds
  - Short Term Funds (programs and capital projects)
  - Operating cash
- $50 million in Foundation assets managed by Northern Trust, a leading US asset manager with over $1.6 trillion in assets
- 27 mitigation endowments for USACE mitigation banks/PRMs and USFWS conservation banks
- ~$10 million mitigation endowment/fund assets
- Work with 8 different mitigation banking sponsors



Establishing a Mitigation Bank Endowment with TPWF

- Structured as a **donation** (not tax deductible) that establishes a permanently restricted, designated endowment fund at TPWF
- All endowment funds have their own individual investments reports produced by Northern Trust, shared quarterly
- Bank Sponsor is "Grantor" of funding to TPWF
- Endowment Agreement between TPWF and Grantor outlines restrictions on management and use of funds
  - Includes a Legal description of mitigation site/property
  - Outlines distribution methodology
    - Inflation adjustment
    - Frequency (annual)
    - Spending policy (defined within the Investment Policy Statement)
  - Allows Grantor to assign a new Long-Term Manager to receive distribution

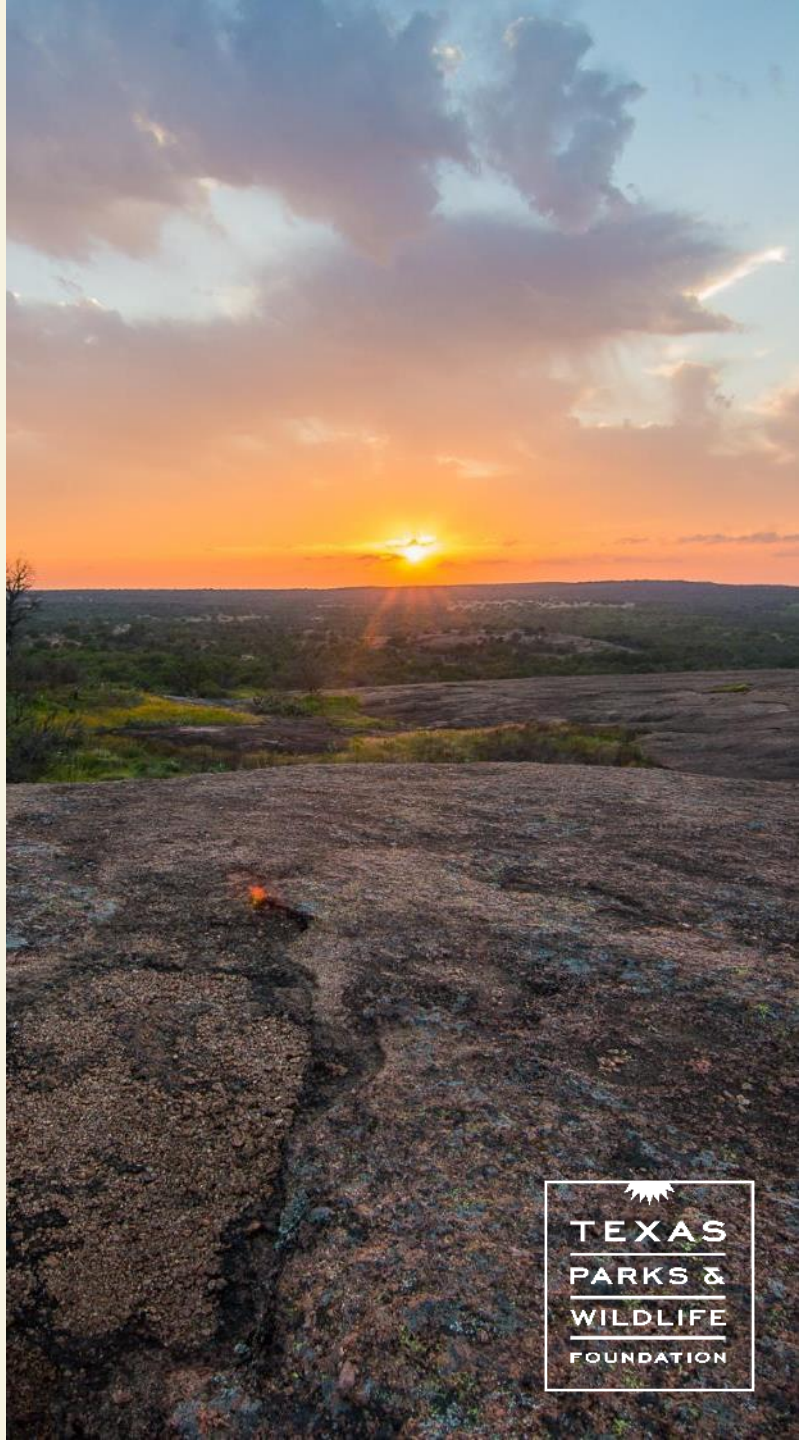


Things We Require

- Cap Rate no greater than 4% (to account for for inflation, administrative, and investment fees)
- No distributions earlier than one year after the Target Amount has been 100% funded
- Minimum of $100,000 for fully funded endowment - with rare exceptions
- TPWF Admin Fee of 0.50-0.75% depending on endowment size

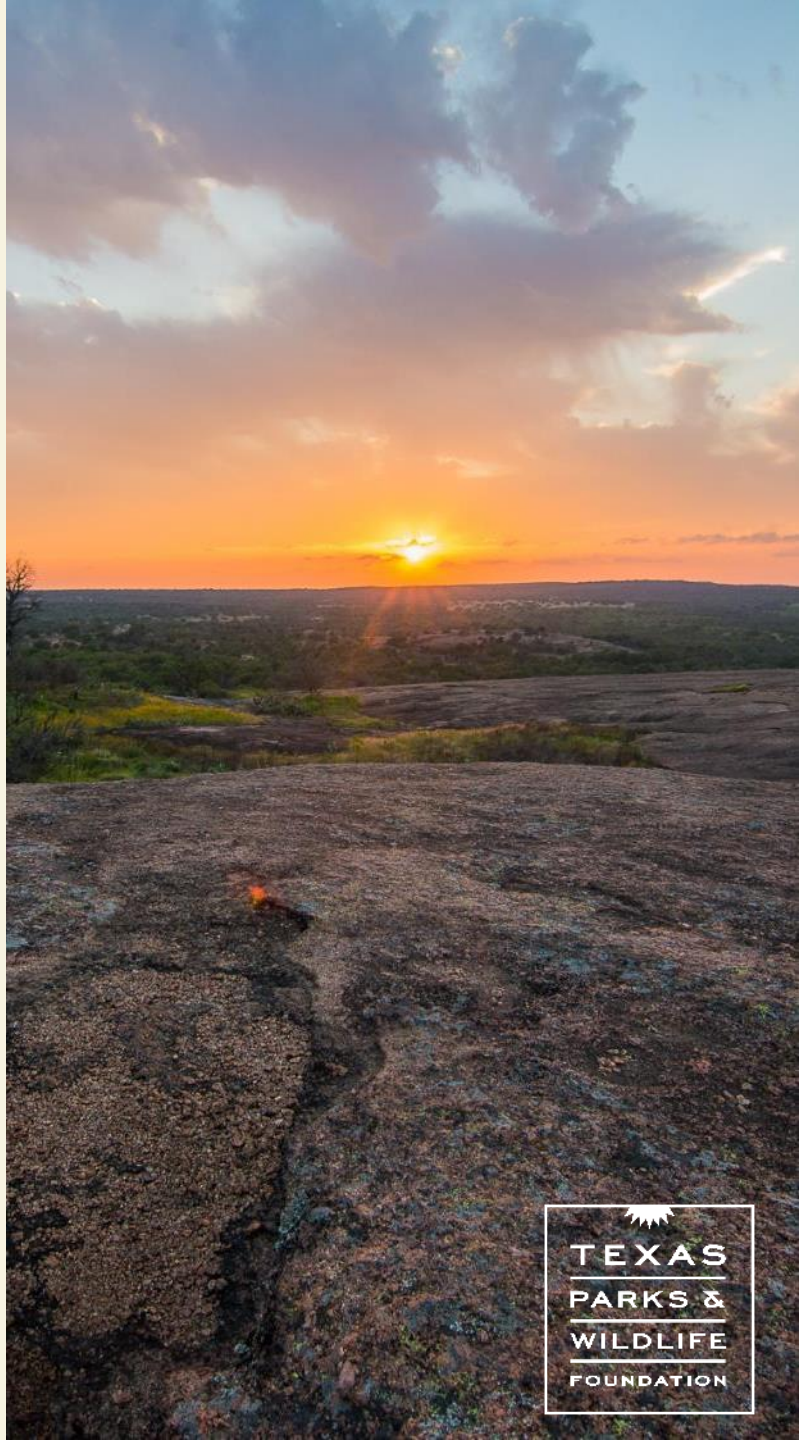
Things We Encourage

- Two years of operating cash set aside to allow endowment to grow for three years before making a distribution
- **But,** most endowment budgets we see include a contingency amount to allow for fluctuations in distributions/investment returns
- Conservative Cap Rate (ideally 2.5-3%)



Investment Approach and Distribution Methodology

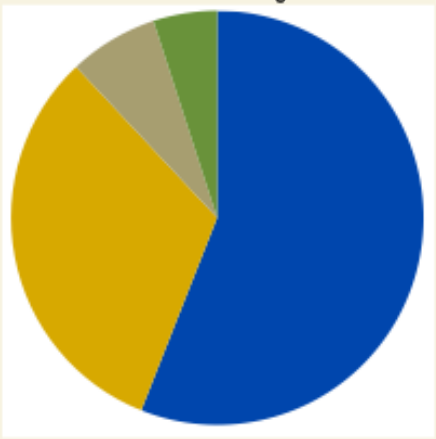
- Our investment methodology is drive by our Investment Policy Statement
- Endowment principal must be invested to generate earnings and increase to provide adequate funding for annual maintenance costs and to ensure that its real purchasing power does not decline over time due to inflation
- Distributions in excess of the projected Annual Expenditures for a mitigation bank may be authorized if such distributions pay costs and expenses for management activities outlined in the MBI **and** protect the financial viability of the endowment.
- Inflation adjustment is done annually based on a 5-year rolling average (CPI).



TPWF LONG TERM IPS TARGETS

Description	Percent
Equity	**56.0%**
Large Cap	38.0%
Small Cap	4.0%
International Developed	11.0%
International Emerging	3.0%
Fixed Income	**32.0%**
Corporate & Government	23.0%
High Yield	6.0%
Inflation-Linked	3.0%
Real Estate	**7.0%**
Global Real Estate and Infrastructure	7.0%
Natural Resources	**5.0%**
Natural Resources	5.0%
Total	**100.0%**

Current Holdings



Expected Portfolio Statistics *	
Average Return (pre-tax)	7.4%
Average Return	7.4%
Compound Return (pre-tax)	6.8%
Standard Deviation	11.1%
Sharpe Ratio (pre-tax)	0.42
Yield (pre-tax)	3.4%

* See "Important Information Regarding Hypothetical Projections". Past performance does not guarantee future results. Total returns are before the deduction of fees.

Long Term Financial Management – Best Practices for the Endowment Holder

Accountability and Fiduciary Oversight

- Overseen by a Board of Directors and Finance Committee comprised of professionals with business and investment experience.
- Finance Committee establishes our Investment Policy, which sets the strategic asset allocation and performance objectives.

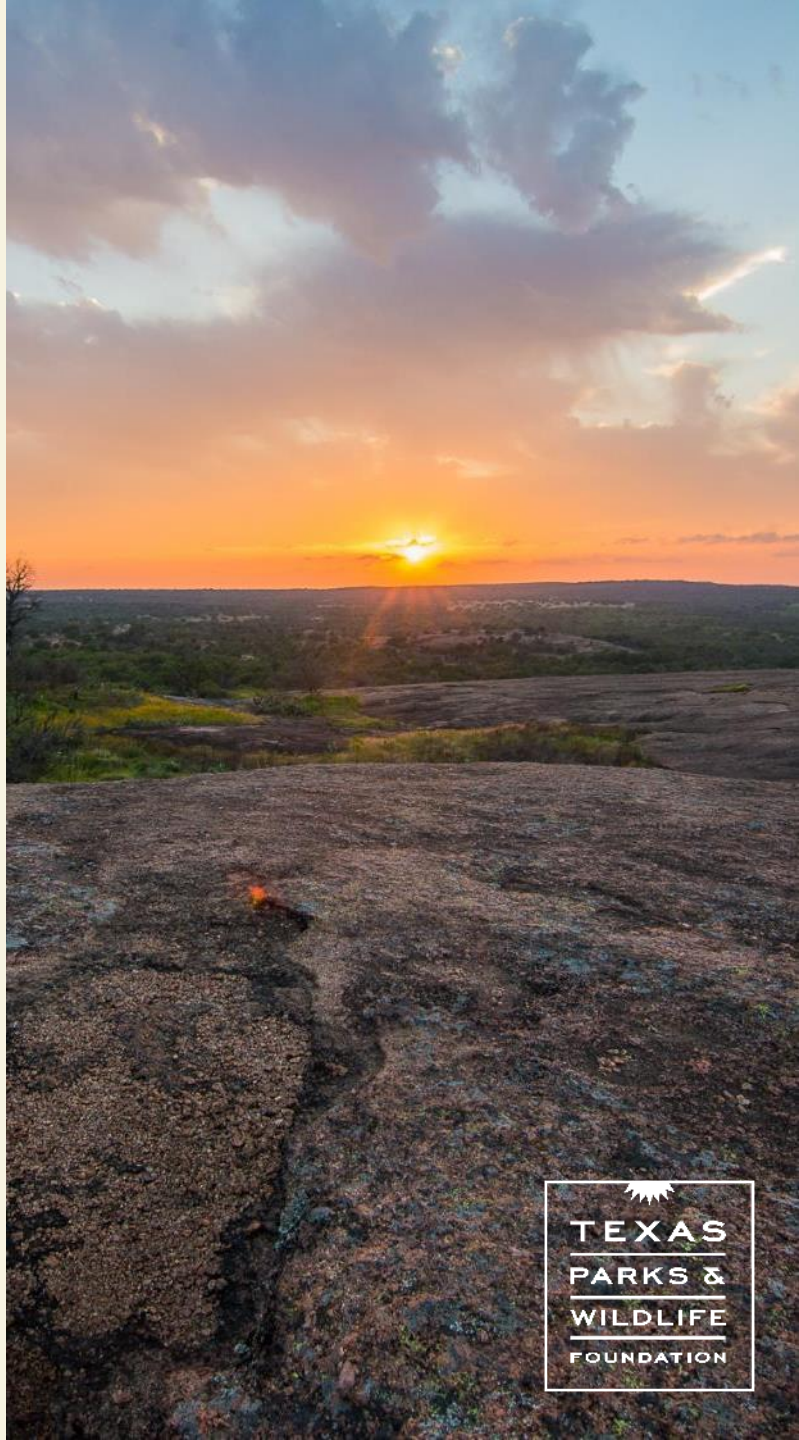
Investment Standard

- Uniform Prudent Management of Institutional Funds Act (UPMIFA) – a set of regulations that ensure that charitable institutions had guidelines on how to prudently spend endowment funds.

Organizational Capacity

- Qualified personnel
- Robust operational infrastructure,
- Technical competency
- Effective oversight

All are critical for successful management and administration of mitigation endowment funds!



NFWF IDEA's Involvement with Compensatory Mitigation

Who is NFWF and what is IDEA?

- NFWF Impact-Directed Environmental Accounts (IDEA) supports the work of federal, state, and local governmental agencies
- Administers natural resource funding arising from environmental *enforcement and regulatory* proceedings
- Enforcement funds - settlement of judicial/administrative cases
- Regulatory funds - permit-derived mitigation funds

Mitigation funds managed by IDEA

- Short-term mitigation funds
- Mitigation financial assurance mechanisms
- Sponsor of ILF mitigation program in USACE Sacramento District
- Holder of long-term management funds aka "mitigation endowments" since 2011

NFWF

Today's Objective:
Provide an Overview of
NFWF IDEA's Mitigation Endowment Platform

1. Fund Ownership and Responsibilities
2. Investment Considerations
3. Impacts of Inflation over Time
4. Mechanics of NFWF IDEA's Platform
5. Buffering Mechanisms

Fund Ownership and Responsibilities

- NFWF IDEA holds each Mitigation Endowment fund as a neutral fiduciary in trust for the benefit of the specified property
  - Distinct accounts (not co-mingled)

- NFWF IDEA does *not* own or hold the funds as its own net asset
  - The funds are held as an asset with a corresponding liability
  - Bankruptcy and legal considerations

- Fiduciary and Legal Responsibilities
  - Fiduciary custody of funds
  - Oversight of funds financial investment by outside professional investment manager
  - Funds legally restricted to purposes and uses set forth in regulatory permits, banking instruments, ILF program instruments, and other agreements

NFWF

Investment Considerations

- The investment portfolio for the NFWF IDEA Mitigation Endowment Platform was custom-built for and approved by a key regulatory agency in CA that reflects the return target inherent in the agency's approval of an average annual 3.5% Spend Rate (aka Cap Rate) for the portfolio
- The Spend Rate/Cap Rate bears a coherent relationship to the investment strategy for the portfolio and is defined by a written Investment Policy Statement that accurately reflects the return target inherent in the Spend Rate/Cap Rate
- The Investment Policy seeks to achieve 4.5% real on average annually over long periods of time (3.5% for land management activities, 1% for NFWF IDEA's annual management fee) plus keep pace with inflation
- Therefore, it is a fully diversified portfolio -- It includes public equity, private capital, cash, core bonds, private credit, real estate, public natural resources, private natural resources, and diversifying strategies

Impacts of Inflation Over Time

- The Initial Amount of a Long-Term Management Fund is a dollar amount calculated at a point in time
- This is typically the year in which the financial analysis is completed (the “Base Year”), so the Initial Amount is expressed in “Base Year Dollars”
- Ideally the Initial Amount is paid in full in the Base Year
- **However**, if the Initial Amount is **not** paid in full in the Base Year, then the amount(s) when paid **must be** inflation-adjusted
- Actual examples using U.S. inflation data:
  - $100,000 in Jan. 2014 is equal to $131,850 in Jan. 2024
  - $100,000 in Jan. 2019 is equal to $122,528 in Jan. 2024

Mechanics of NFWF IDEA's Mitigation Endowment Platform

- NFWF IDEA enters into long-term funding agreement with the Recipient long-term land manager governing administration of the funds
  - The applicable regulatory agency approves the agreement and may have an oversight role
- NFWF IDEA makes annual advance disbursements for work to be done the following calendar year
  - Presumption of payment
  - Any overage at year end can be offset against the next year payment
- Disbursements made in accordance with a payment schedule that translates the long-term management plan's costs in Base Year dollars into year over year payments
- Payments are inflated by actual inflation from Base Year to year of payment

Buffering Mechanisms

- Agencies may require in the cost analysis (1) a minimum percentage **contingency** amount and/or (2) funds for **adaptive management or catastrophic events**
- Agencies may require the Mitigation Endowment to be fully funded for a number of years allowing it to mature before it makes its first disbursement (i.e., require a "**delayed spend**" period)
- NFWF IDEA long-term funding agreements do not allow incremental disbursement of funds for non-annual work items (e.g., periodic fencing), i.e., disburse the full amount for the work item for the year it's needed
- NFWF IDEA long-term funding agreements retain the applicable agency's ability to suspend or reduce disbursements to protect viability of the Mitigation Endowment

Best (Essential) Practices Round-Up

- ✓Establish sufficient funding; use calculators/spreadsheets
- ✓ Use an Endowment or Trust
- ✓ Verify estimates
- ✓ Tie credit release with LTM funding
- ✓ Use buffering mechanisms
- ✓ Adjust principal required for inflation until fully funded
- ✓ Bank Instrument, plan, or permit specifies adjustments for inflation and use of buffering mechanisms

Questions and Discussion

- Consider limitations on LTM options:
  - What is the best approach for permittee-responsible mitigation (PRM)?
    - Recommend agency guidance, with stakeholder input, on when endowments can be pooled
  - Limited qualified entities to serve in LTM roles necessitates flexibility and a focus on equivalency in purpose and function

- Questions?

Some resources

ELI & LTA. 2012. Wetland & stream mitigation: a handbook for land trusts.
https://www.eli.org/sites/default/files/eli-pubs/d22_04.pdf

TNC. 2015 Stewardship calculator and handbook
https://www.conservationgateway.org/ConservationPlanning/ToolsData/Pages/stewardshipcalculator.aspx

National Fish & Wildlife Foundation. Long-term stewardship funds
https://www.nfwf.org/mitigating-impacts/long-term-stewardship-funds

Uniform Prudent Management of Institutional Funds Act
https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=d88fe964-fa49-9b1e-e197-2389fcc49990&forceDialog=0

Bureau of Labor Statistics CPI Calculator
http://www.bls.gov/data/inflation_calculator.htm