Lessard-Sams Outdoor Heritage Council Laws of Minnesota 2019 Accomplishment Plan

Date: October 17, 2018

Program or Project Title: Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement and Restoration, Phase 11

Funds Recommended: \$ 2,359,000

Manager's Name: John Lenczewski Organization: Minnesota Trout Unlimited

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Legislative Citation: ML 2019, Ch. X, Art. 1, Sec. 2, subd, X(x)

Appropriation Language:

County Locations: Dakota, Fillmore, Houston, Lake, Pine, St. Louis, Wabasha, and Winona.

Eco regions in which work will take place:

- Metro / Urban
- Northern Forest
- Southeast Forest

Activity types:

- Enhance
- Protect in Easement

Priority resources addressed by activity:

• Habitat

Abstract:

Minnesota Trout Unlimited will enhance and restore habitat for fish and wildlife in and along priority coldwater streams located on existing conservation easements and public lands around the state. Trout streams are a relatively scarce resource and increasing threats to them require accelerating habitat work to reduce the backlog of degraded stream reaches. Population outcomes will be maximized by improving the connectivity of habitat and fish and wildlife populations, and building upon work on adjacent sections. Stream easements will be acquired in Pine County and the Duluth area to project the highest quality trout habitat and facilitate habitat enhancement.

Design and scope of work:

Minnesota Trout Unlimited ("MNTU") proposes to directly restore or enhance degraded habitat on priority streams with existing protections under the Aquatic Management Area system or public ownership. We propose to restore or enhance habitat in and along these public waters (and counties):

- 1. Trout Brook (Dakota);
- 2. Hay Creek (Pine County);
- 3. Beaver Creek (Houston);
- 4. Cedar Valley Creek (Winona);





- 5. Rice Creek (Fillmore);
- 6. Split Rock River (Lake);
- 7. Manitou River (Lake);
- 8. Keene Creek (St. Louis);
- 9. Duluth area streams (St. Louis);
- 10. Numerous streams statewide (prioritized maintenance list).

We will also protect via trout stream easements segments of native brook trout streams in Pine County and the Duluth area. Once acquired the easements will be held by the MNDNR.

If contracting efficiencies or success leveraging funding enable us to, we will extend project lengths, work on one or more of the projects originally proposed but temporarily "cut" by us due to lower funding than requested [Gilbert Creek (Wabasha), Mill Creek (Fillmore), Pine Creek (New Hartford Creek)(Winona), and Torkelson Creek (Fillmore)], and/or work on additional streams. The Split Rock River project will be designed and permitted, and construction funding sought in the next funding cycle.

Individual project descriptions are provided in an attachment.

Goals and scope of work.

The goals of each project are to increase the carrying capacity and trout population of the stream, increase angling access and participation, improve water quality and provide other benefits to aquatic and terrestrial wildlife. Each project will accomplish one or more of these objectives: (a) increase adult trout abundance, (b) reduce stream bank erosion and associated sedimentation downstream, (c) reconnect the stream to its floodplains to reduce negative impacts from severe flooding, (d) increase natural reproduction of trout and other aquatic organisms, (e) increase habitat for invertebrates and non-game species, (f) improve connectivity of habitat along aquatic and riparian (terrestrial) corridors, (g) improve riparian forests as appropriate, (h) improve angler access and participation, and (i) protect productive trout waters from invasive species. The scope of work and methods utilized vary by project and are discussed in the individual project descriptions provided in the attachment.

How priorities were set.

MNTU focuses on those watersheds likely to continue to support viable, fishable populations of naturally reproducing trout and steelhead fifty years and more from now. Work is done only where degraded habitat is a limiting factor for a quality, sustainable fishery. Priority locations are determined using MNTU members' knowledge of watersheds, MNDNR management plans and surveys, other habitat and conservation planning efforts, consultations with MNDNR professionals, and science based criteria. All things being equal, we consider the potential to draw new anglers outdoors, increase public awareness, engage landowners in conservation, foster partnerships, and increase public support for OHF projects.

Stakeholder support.

We continue receiving strong support from local communities, anglers, landowners, partners and the public.

How does the request address MN habitats that have: historical value to fish and wildlife, wildlife species of greatest conservation need, MN County Biological Survey data, and/or rare, threatened and endangered species inventories:

The projects will restore or enhance degraded habitat for fish and wildlife in and along coldwater streams and rivers which historically supported naturally reproducing trout or steelhead populations enjoyed by generations of anglers. While trout are the apex predator and key indicator species in coldwater systems, a host of rare aquatic species are uniquely associated with these systems. Well-functioning coldwater aquatic ecosystem are far less "common" than the 6% of Minnesota's total stream and river miles which theoretically can still support trout. They are very rare in the western half of the state. Even many streams considered to be the best remaining trout streams have badly degraded segments which disrupt connectivity and have significant impacts on the productivity and long term resilience (and self-sustainability) of the overall trout population. Our trout streams face growing threats from warming temperatures, increased frequency of severe flooding, and rising demand for groundwater pumping from the aquifers which supply vitally important cold water inputs. The proposed projects are focused on streams and stream segments which will benefit from improved connectivity and help ensure Minnesota retains at least some high quality coldwater fisheries for future generations.

Describe the science based planning and evaluation model used:

In selecting project sites, MNTU reviews MNDNR watershed specific fisheries management plans and other conservation planning efforts, consults with MNDNR professionals, and applies ranking criteria developed by the MNDNR. Projects must have the potential to increase the carrying capacity (fish numbers), the streams have natural reproduction, and the public have access to them. Improving the connectivity of good aquatic and riparian habitat is an important consideration and the projects are selected to expand or connect gaps in these corridors. We are increasingly targeting stream segments which build off earlier habitat or protection work in the same stream or watershed.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this program:

- H3 Improve connectivity and access to recreation
- H6 Protect and restore critical in-water habitat of lakes and streams

Which other plans are addressed in this program:

- Driftless Area Restoration Effort
- Strategic Plan for Coldwater Resources Management in Southeastern Minnesota

Which LSOHC section priorities are addressed in this program:

Metro / Urban:

• Enhance and restore coldwater fisheries systems

Northern Forest:

 Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Southeast Forest:

• Protect, enhance, and restore habitat for fish, game, and nongame wildlife in rivers, cold-water streams, and associated upland habitat

Relationship to other funds:

Not Listed

Does this program include leverage in funds:

Not Listed

Per MS 97A.056, Subd. 24, Any state agency or organization requesting a direct appropriation from the OHF must inform the LSOHC at the time of the request for funding is made, whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose:

Not applicable.

Describe the source and amount of non-OHF money spent for this work in the past:

Appropriation Year	Source	Amount
n/a	n/a - each project is a newstand alone project	

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended:

MNTU's coldwater aquatic habitat restoration and enhancement projects are designed for long-term ecological and hydraulic stability. Once in-stream work is completed and riparian vegetation well established, no significant maintenance is usually required in order to sustain the habitat outcomes for several decades. Reconnected floodplains allow floodwater to quickly spread out and dissipate energy, reducing the destructive impact of a flood. Flood waters typically flatten streamside vegetation temporarily and do not damage the in-stream structures. The tenfold increase in trout populations and threefold increase in large trout which are common following completion of a southeast Minnesota project, are gains which are sustainable long-term through natural reproduction.

We anticipate that long-term monitoring of the integrity of the improvements will be done in conjunction with routine inspections and biological monitoring conducted by local MNDNR staff, MNTU members, or landowners as appropriate. This monitoring will not require

separate OHF or other constitutional funding. In the event that there are other maintenance costs, potential sources of funding and volunteer labor include MNTU, MNDNR AMA maintenance funding, and other grant funds and organizations. MNTU volunteers will help provide long-term monitoring and periodic labor.

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
	,		Alert DNR and develop actions	Conduct maintenance with volunteers and/or contractors if DNR does not.
Every 3 years thereafter	IMNIU volunteers or agency.	Inspect structural elements and vegetation	Develon action plan with DNR	Perform or assist DNR with maintenance if needed.

Activity Details:

If funded, this program will meet all applicable criteria set forth in MS 97A.056 - Yes

Will there be planting of corn or any crop on OHF land purchased or restored in this program - No

Will the eased land be open for public use - Yes

Fishing

Is the land you plan to acquire (easement) free of any other permanent protection - Yes

Who will manage the easement?

MNDNR

Who will be the easement holder?

MNDNR

What is the anticipated number of easements (range is fine) you plan to accomplish with this appropriation?

While only an estimate, we calculate that six miles of stream corridor length will likely encompass 12 to 24 different landowners (based upon 1/2 mile to 1/4 mile of stream length per parcel).

Are there currently trails or roads on any of the acquisitions on the parcel list - No

Will new trails or roads be developed or improved as a result of the OHF acquisition - No

Will the acquired parcels be restored or enhanced within this appropriation? - Yes

One or more easement acquired in Pine County will likely need enhancement work, and some of this appropriation is earmarked for that purpose. Other parcels likely will not need restoration or enhancement. However, we will identify those that do and make funding for enhancement of those habitats a priority in future requests.

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program - Yes

Is the activity on permanently protected land per 97A.056, subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 - Yes (AMA, County/Municipal, Public Waters, State Forests, State Park)

Accomplishment Timeline:

Activity	Approximate Date Completed
Begin project planning, survey, design and permitting work following a July 2019 appropriation.	Begin summer 2019
Begin communications with riparian landowners re easements	Summer 2019
Begin habitat enhancements on several projects in 2020 field work season.	Begin 2020 field work season
Complete title work and closing on easements throughout 2020 and first half 2021.	2021
Complete all habitat enhancements, including establishment of riparian vegetation.	June 2024

Date of Final Report Submission: 12/1/2024

Federal Funding:

Do you anticipate federal funds as a match for this program - Yes

Are the funds confirmed - No

What is the approximate date you anticipate receiving confirmation of the federal funds - October 2020 or later, since they need completed designs and permits first.

Outcomes:

Programs in the northern forest region:

• Improved aquatic habitat indicators Measured through surveys of fish, macro invertebrates and/or exposed substrates. Abundance, size structure and species diversity are considered.

Programs in metropolitan urbanizing region:

• Improved aquatic habitat indicators Measured through surveys of fish, macro invertebrates and/or exposed substrates. Abundance, size structure and species diversity are considered.

Programs in southeast forest region:

• Enhancement of in-stream and riparian corridor habitat creates miles of connected habitat. Outcomes in aquatic life are measured through surveys of fish, macro invertebrates and/or exposed substrates. Abundance, size structure and species diversity are considered.

Budget Spreadsheet

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan

How will this program accommodate the reduced appropriation recoomendation from the original proposed requested amount

We will temporarily "cut" four projects in southeast MN (Gilbert Creek, Mill Creek, Pine Creek (New Hartford Creek), and Torkelson Creek) and complete design and permitting only on the Split Rock River project. We will seek construction funding for Split Rock in the next funding cycle.

Total Amount of Request: \$ 2359000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$100,000	\$0		\$100,000
Contracts	\$889,000	\$250,000	NRCS and USFWS	\$1,139,000
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$380,000	\$0		\$380,000
Easement Stewardship	\$40,000	\$0		\$40,000
Travel	\$10,000	\$0		\$10,000
Pro fessio nal Services	\$380,000	\$0		\$380,000
Direct Support Services	\$30,000	\$60,000	TU	\$90,000
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$20,000	\$0		\$20,000
Supplies/Materials	\$510,000	\$200,000	NRCS and USFWS	\$710,000
DNR IDP	\$0	\$0		\$0
Total	\$2,359,000	\$510,000		\$2,869,000

Personnel

Position	FTE	Over#ofyears	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Project manager	0.40	3.00	\$55,000	\$0		\$55,000
Watershed coordinator	0.10	3.00	\$10,000	\$0		\$10,000
Program assistant	0.25	3.00	\$25,000	\$0		\$25,000
Field work interns	0.20	3.00	\$10,000	\$0		\$10,000
Total	0.95	12.00	\$100,000	\$0		\$100,000

Amount of Request: \$2,359,000

Amount of Leverage: \$510,000

Leverage as a percent of the Request: 21.62%

DSS + Personnel: \$130,000

As a % of the total request: 5.51%

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program:

Based upon approved federal rate applied only to personnel, travel and contracted "staff" costs.

What is included in the contacts line?

Construction related services other than professional services. Does not include strictly material costs, but does include some materials where construction bid item is a blend of materials and the labor to install it.

Does the amount in the travel line include equipment/vehicle rental? - No

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging:

None

Describe and explain leverage source and confirmation of funds:

Leverage estimates are estimates only. We anticipate securing approximately \$400,000 in NRCS funding and \$50,000 in USFWS funding. We also hope to secure federal funds for our projects in the Lake Superior basin.

What is the cost per easement for stewardship and explain how that amount is calculated?

Estimated 10% of the easement purchase price, based upon experience of the MNDNR.

Output Tables

Table 1a. Acres by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	0	0
Pro tect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	72	72
Enhance	0	0	0	133	133
Total	0	0	0	205	205

Table 2. Total Funding by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$0	\$0
Pro tect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$540,000	\$540,000
Enhance	\$0	\$0	\$0	\$1,819,000	\$1,819,000
Total	\$0	\$0	\$0	\$2,359,000	\$2,359,000

Table 3. Acres within each Ecological Section

Туре	Metro Urban	Fo rest Prairie	SE Forest	Prairie	N Forest	Total
Restore	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	36	0	0	0	36	72
Enhance	12	0	74	0	47	133
Total	48	0	74	0	83	205

Table 4. Total Funding within each Ecological Section

Туре	Metro Urban	Fo rest Prairie	SE Forest	Prairie	N Forest	Total
Restore	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Pro tect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$270,000	\$0	\$0	\$0	\$270,000	\$540,000
Enhance	\$316,000	\$0	\$1,070,000	\$0	\$433,000	\$1,819,000
Total	\$586,000	\$0	\$1,070,000	\$0	\$703,000	\$2,359,000

Table 5. Average Cost per Acre by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$7500
Enhance	\$0	\$0	\$0	\$13677

Table 6. Average Cost per Acre by Ecological Section

Туре	Metro/Urban	Forest/Prairie	SEForest	Prairie	Northern Forest
Restore	\$0	\$0	\$0	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$7500	\$0	\$0	\$0	\$7500
Enhance	\$26333	\$0	\$14459	\$0	\$9213

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles

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Parcel List

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final parcel list.

Section 1 - Restore / Enhance Parcel List

Dakota

Jakota				
Name	T RDS	Acres	EstCost	Existing Protection?
Tro ut Bro o k	11317226	7	\$0	Yes
Fillmore	-	•		
Name	TRDS	Acres	EstCost	Existing Protection?
Mill Creek	10511231	0	\$0	Yes
Rice Creek	10411223	11	\$0	Yes
Torkelson Creek	10410225	0	\$0	Yes
Houston				
Name	T RDS	Acres	EstCost	Existing Protection?
Beaver Creek	10207224	7	\$0	Yes
Lake				
Name	TRDS	Acres	EstCost	Existing Protection?
Manito u River	05806217	5	\$0	Yes
Split Rock River	05408206	0	\$0	Yes
Pine				
Name	T RDS	Acres	EstCost	Existing Protection?
Hay Creek	04118232	5	\$0	Yes
St. Louis				
Name	TRDS	Acres	EstCost	Existing Protection?
Keene Creek	05015236	3	\$0	Yes
Wabasha	-	•		
Name	TRDS	Acres	EstCost	Existing Protection?
Gilbert Creek	11113211	0	\$0	Yes
Winona				
Name	TRDS	Acres	EstCost	Existing Protection?
Cedar Valley Creek	10606232	7	\$0	Yes
Pine Creek (New Hartford Creek)	10505219	0	\$0	Yes
L				

Section 2 - Protect Parcel List

Pine

Name	T RDS	Acres	Est Co st	Existing Protection?	Hunting?	Fishing?
Hay Creek	04018208	36	\$0	No	Not Applicable	Full
St. Louis						
Name	TRDS	Acres	Est Co st	Existing Protection?	Hunting?	Fishing?
White Pine River	05016217	36	\$0	No	Not Applicable	Full

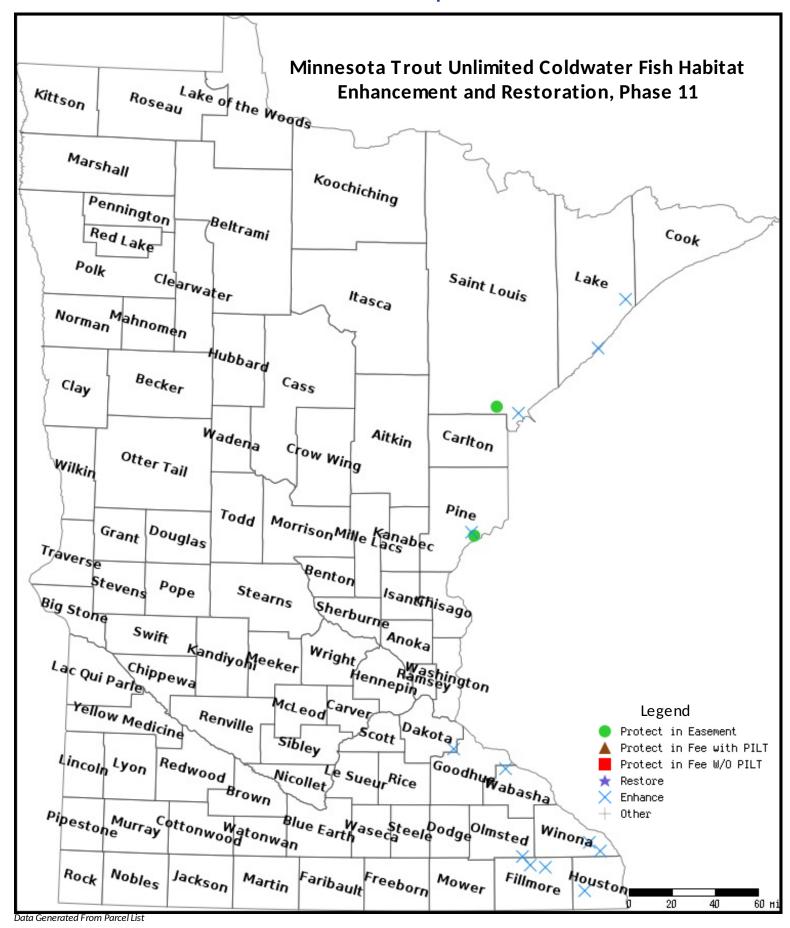
Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Parcel Map



Lessard-Sams Outdoor Heritage Council Comparison Report

Program Title: 2019 - Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement and Restoration, Phase 11

Organization: Minnesota Trout Unlimited

Manager: John Lenczewski

Budget

Requested Amount: \$3,750,000 Appropriated Amount: \$2,359,000

Percentage: 62.91%

	T o tal Requested		Total Appropriated		Percentage of Request	
BudgetItem	LSOHC Request	Anticipated Leverage	Appro priated Amo unt	Anticipated Leverage	Percentage of Request	Percentage of Leverage
Personnel	\$120,000	\$0	\$100,000	\$0	83.33%	-
Contracts	\$1,510,000	\$250,000	\$889,000	\$250,000	58.87%	100.00%
Fee Acquisition w/ PILT	\$0	\$0	\$0	\$0	-	-
Fee Acquisition w/o PILT	\$0	\$0	\$0	\$0	-	-
Easement Acquisition	\$380,000	\$0	\$380,000	\$0	100.00%	-
Easement Stewardship	\$40,000	\$0	\$40,000	\$0	100.00%	-
Travel	\$10,000	\$0	\$10,000	\$0	100.00%	-
Professional Services	\$630,000	\$0	\$380,000	\$0	60.32%	-
Direct Support Services	\$30,000	\$60,000	\$30,000	\$60,000	100.00%	100.00%
DNR Land Acquisition Costs	\$0	\$0	\$0	\$0	-	-
Capital Equipment	\$0	\$0	\$0	\$0	-	-
Other Equipment/Tools	\$20,000	\$0	\$20,000	\$0	100.00%	-
Supplies/Materials	\$1,010,000	\$200,000	\$510,000	\$200,000	50.50%	100.00%
DNR IDP	\$0	\$0	\$0	\$0	-	-
Total	\$3,750,000	\$510,000	\$2,359,000	\$510,000	62.91%	100.00%

How will this program accommodate the reduced appropriation recommendation from the original proposed requested amount?

We will temporarily "cut" four projects in southeast MN (Gilbert Creek, Mill Creek, Pine Creek (New Hartford Creek), and Torkelson Creek) and complete design and permitting only on the Split Rock River project. We will seek construction funding for Split Rock in the next funding cycle.

Output

Table 1a. Acres by Resource Type

Туре	Total Proposed	Total in AP	Percentage of Proposed
Restore	0	0	-
Protect in Fee with State PILT Liability	0	0	-
Protect in Fee W/O State PILT Liability	0	0	-
Pro tect in Easement	72	72	100.00%
Enhance	203	133	65.52%

Table 2. Total Funding by Resource Type

Туре	Total Proposed	Total in AP	Percentage of Proposed
Restore	0	0	-
Pro tect in Fee with State PILT Liability	0	0	-
Pro tect in Fee W/O State PILT Liability	0	0	-
Pro tect in Easement	540,000	540,000	100.00%
Enhance	3,210,000	1,819,000	56.67%

Table 3. Acres within each Ecological Section

Туре	Total Proposed	T o tal in AP	Percentage of Proposed
Restore	0	0	-
Protect in Fee with State PILT Liability	0	0	-
Pro tect in Fee W/O State PILT Liability	0	0	-
Pro tect in Easement	72	72	100.00%
Enhance	203	133	65.52%

Table 4. Total Funding within each Ecological Section

Туре	T o tal Proposed	Total in AP	Percentage of Proposed
Restore	0	0	-
Pro tect in Fee with State PILT Liability	0	0	-
Protect in Fee W/O State PILT Liability	0	0	-
Pro tect in Easement	540,000	540,000	100.00%
Enhance	3,210,000	1,819,000	56.67%