PAPO INTERAGENCY MITIGATION & RECLAMATION OFFICE

1625 West Pine
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Pinedale, Wyoming 82941
(307) 367-5363

2016 PAPO APPLICATION FOR FUNDING

(Deadline for applicants is February 1, 2016 - use additional sheets if necessary)

1. GENERAL PROJECT INFORMATION

Project Name:

New Fork River stream bank restoration and Gas Wells boat ramp project

General Location (distance and direction from nearest city/town, attach map at a scale not less than ½" = 1 mile): The project area is located on the New fork River 5 river miles downstream of the confluence of the New Fork and East Fork Rivers. To access the project area by road, drive from Pinedale on US 191 16 miles and turn right onto Sublette County road 106 (Boulder South road). Drive east for 4.5 miles then turn right at the intersection of CR 106 and the Middle Anticline Road. Drive 0.75 miles west to the New Fork River and boat access. Downstream - Zone 12 NAD83 599084 4724642: Upstream Boundary - Zone 12 NAD83 600755 4725343

Legal Location of Project (attach map at a scale not less than 1" = 2,000').
Township: T 31 N
Range: R 109 W
Section(s): 12
County: Sublette

Surface Ownership (check all that apply): Federal X State _____ Private_____

**If project includes a mosaic of land ownerships (e.g., mix of federal, state and/or fee lands), provide a breakdown for each specific owner by acres and percent of total project area.

Contact Information for Affected Parties or Agencies

Martin Hudson, Outdoor Recreation Planner (see contact info below)

2. APPLICANT INFORMATION

Name/Organization: Bureau of Land Management/HD01

Mailing Address: P.O Box 768

City: Pinedale *State:* WY *Zip Code* : 82941

Daytime Phone # 307-367-5315 *Fax #* 307-367-5329

Email Address: mhudson@blm.gov

Point of Contact (if different from above) Martin Hudson, Outdoor Recreation Planner

3. PROJECT DESCRIPTION

General Project Type (check all that apply): Wildlife X

Land Use/Livestock _____ Land Use/Recreation X

Cultural _____ Other Mitigation for soil erosion/sedimentation

Describe Project Proposal (e.g., mechanical treatment, water improvement, etc.)

This request is to support riparian habitat and recreational interests through a partnership with the BLM, WGF and Trout Unlimited The project area is located 5 river miles downstream from the New Fork River East Fork Confluence boat access area.

The project includes habitat improvement along ~1.5 miles of the New Fork River on BLM land at the Gas Wells Access Site and upstream from this point. The project will improve habitat primarily for sport fish (brown trout, rainbow trout, and cutthroat trout) but also for other native nongame fish species. The design includes development of a boat access area including a parking lot, at a site previously used for this purpose.

This project is being completed in two phases.

Phase I: This phase included the survey, design and final planning report. Intermountain Aquatics assessments conducted to date determined the following: existing channel conditions for the project area, morphological characteristics of the existing habitat, habitat evaluations for trout life history stages, riparian vegetation types and condition evaluations and summary of the existing conditions, identified problems that can be addressed through restoration, and evaluated existing channel condition. The final reports will include the evaluations of all deliverables identified in RFP and all raw data and field measurements, and provide conceptual design of the proposed restoration reach that identifies opportunities for streambank rehabilitation and improved river access via construction of a boat ramp and parking area (see attached documents: preliminary design and approximate cost estimates). The cost to complete the habitat and hydrologic assessment and habitat improvement designs initiated in 2015 was $32,147. Funding is still needed to complete CAD designs, the Final Design Report, and final implementation cost estimates for habitat improvement and boat access planning work initiated in 2015. To date WGF has funded $15,000 with an additional $13,000 possibly available in FY17. WGF has provided over $15,000 in kind towards this project. JIO funded $6,000. TU and BLM have provided over $10,000 each towards planning.

Phase II: This phase will include completing NEPA, ACOE permitting and implementation of the instream channel improvements, vegetation enhancements and developing a boat access and parking area. Intermountain Aquatics will provide BLM, TU and WGF the final designs in 2016 with implementation starting in 2017. The estimated cost to improve habitat in the entire 1.5 river miles and improve the boat access and parking area is $1,200,000.

Funding sources for implementation include: PAPO, Fluid Mineral Producers, WGF, TNC, TU, WWNRT, and others not yet identified.

Background Information

The New Fork River originates in the west-slope of the Wind River Mountains and flows 87 miles to the confluence with the Green River. The river is of statewide importance and one of the most popular fisheries in the region. The river is managed as a wild brown trout fishery. The primary impacts to the brown trout population are degraded riparian and stream habitats. Stream habitat through this section of the New Fork River is typically wide and shallow with limited pools. Natural and unnatural eroding banks are present along this section of river. This project is expected to increase the wild trout production in this section of the New Fork

River and subsequently, angler catch rates, plus improve channel morphology. Implementation of the project will decrease the width to depth ratios, increase sediment transport capacity, decrease in channel sediment loading, increase the riparian vegetation width, and increase woody vegetation to the stream banks and stream channel, and increase overhanging vegetation cover. This site historically supported a boat ramp which is no longer usable due to the 6 foot high stream banks. The designs completed from this work will include the stream channel habitat improvements, riparian enhancements, and a new boat ramp and parking area.

The BLM, Pinedale Filed Office is requesting funds to complete: 1. Phase 1of the New Fork River Habitat Restoration and River Access project, and 2. Phase II which includes implementation of the restoration plan.

Total Project Acres (if applicable) ± 2 acres 15 acres

Acres Indirectly Affected (if applicable, explain) The New Fork River downstream of the project area by decreasing the total sediment loading to the river. Approximately 10 river miles before it reaches the Green River.

4. A. WHAT ARE THE OBJECTIVES OF THE PROJECT?

The ecological systems that will be improved include the riparian and stream habitats. This section of the New Fork River has degraded habitat and excessive stream channel instability, including aggradation and lateral movement which are causing the river to be wide and shallow.

Improvements to the New Fork River will enhance, improve and manage priority wildlife habitats that have been degraded, increase wildlife-based recreation through habitat enhancements, increase public awareness of wildlife habitat issues and critical connections between healthy habitat and abundant wildlife population, and promote collaborative habitat management efforts with the general public, private landowners, industry, federal agencies and conservation partners.

The project will bring together stakeholders to recognize and restore aquatic resources and values.

The development of a simple boat ramp and parking area for the public will provide a safe launch or take out area for watercraft. The project supports important recreation values including user awareness and appropriate use of river resources. This project supports regional tourism efforts to market quality recreation opportunities.

The quantifiable objectives include the following:
1) Increase bedform diversity: Increase the number of pools greater than 4' in depth at low flow conditions from 1.7/mile to >13/miles (3 to 24 as drawn in concept plans).
2) Decrease streambank erosion: The percent of actively eroding sections within each treated bank will be reduced by 95%. This is predicted to decrease the sediment contribution by 2734 tons/year.
3) Increase riparian habitat: increase riparian buffer width from 0 ft to 16 - 20 ft.
4) Improve vertical and lateral channel stability by reducing channel widths to improve sediment transport capacity and stabilizing eroding banks. Decrease riffle w/d ratios from 50-60 to 30-40.
5) Increase overall habitat value for all life stages of the trout population.

B. HOW DOES THE PROJECT MEET THE PAPO STRATEGIC PLAN GOALS? (please refer to the PAPO 2016 Ranking Score Sheet – link is on PAPO website)

(10 pts) Goal 1-Wildlife
Actively pursue projects to benefit wildlife on a landscape scale with a focus on those populations impacted by development within the Pinedale Anticline Project Area (PAPA): This project would benefit big game species such as moose, pronghorn, and mule deer by increasing the amount and quality of riparian habitat available for use. Riparian areas represent a key landscape interface between upland habitats and rivers. These areas provide valuable forage for wildlife during all seasons.

(10 pts) Goal 2-Wildlife
Evaluate and respond to population trends to benefit wildlife species impacted by development on the PAPA: Pronghorn and Mule deer represent species identified in the PAPA ROD matrix. Mule deer population declines have resulted in the triggering of a mitigation response. The first step in the sequential mitigation response outlined in the SEIS ROD is on-site habitat enhancements across the core and flanks areas. This project is located specifically within the core development area of the PAPA and represents an on-site mitigation effort directed at improving wildlife habitat function and effectiveness on the PAPA.

(10 pts) Goal 3-Wildlife
Develop and utilize a measurement system for evaluation on and off-site habitat suitability/effectiveness and function for key species impacted on the PAPA with habitat suitability/effectiveness as the baseline for the effort: This project will provide excellent baseline and monitoring evaluation of the habitat in the New Fork River within the PAPA.

C. HOW DOES THE PROJECT MEET THE 2016 PAPO PRIORITIES? (please refer to the PAPO 2016 Ranking Score Sheet)

(25 pts) Mitigate impacts to current high priority issues (i.e., sage-grouse, mule deer and air quality). Through an increase in the amount and quality of riparian habitat available along the New Fork River corridor for use by mule deer, a current high-priority species, this project mitigates impacts to the Sublette Mule deer herd within the boundaries of the core development area.

(15 pts) Mitigate impacts to Matrix-listed wildlife species not high priority (i.e., white-tailed prairie dog, pronghorn and pygmy rabbit): The project would enhance crucial winter habitat for pronghorn which is a Matrix-listed species of non-high priority.

FUNDING CONSIDERATIONS PARTNERS/MATCHING FUNDS
(20 pts) Partners will be providing over 80% or more of the necessary funding (monetary or in-kind) that will help leverage PAPO dollars. PAPO will be providing <1% of the total cost for implementation of this project.

FOR WILDLIFE/AQUATIC RESOURCE PROJECTS ONLY:
(15 pts) Mitigates impacts to mule deer that winter within the PAPA boundary: This project improves winter habitat range along the New Fork River corridor which is within the PAPA core development area.

(10 pts) Mitigates impacts of non-Matrix species (e.g. raptors): Increasing bedform diversity and decreasing pool to pool spacing and sediment load will enhance aquatic fish habitat thereby providing improved forage for bald eagles and other raptors.

(10) Mitigates impacts to rangeland health or water quality: This is one of the biggest benefits from this project. Implementation of the riparian and stream channel habitat will improve water quality, decrease sediment loading, improve water temperature, and provide in channel overhanging vegetation. Improving water quality and riparian condition would result in improved forage availability and water access for both livestock and wildlife.

(10 pts) Includes a grazing management plan designed to improve habitat conditions for impacted species and improve grazing efficiencies: Possibly the end product will include a GMP that will assist with protecting the habitat improvements and overall vegetation.

5. WHAT ARE THE DIRECT AND/OR INDIRECT EFFECTS ON OTHER RESOURCES?

- Direct effect to improving habitat for all life stages of fish (game and nongame species) and various life stages for numerous riparian obligate species.
- Direct effect will be a net increase in habitat for trout inhabiting the New Fork River by creating additional structures and ideal habitat for fish during all life stages.
- Direct effect will be the benefits for all live stages of riparian obligate species
- Indirect effect on the core sage grouse population less than 1 miles from the project site
- Direct effect to enhance habitat for moose, deer, waterfowl and other bird species.
- Indirect by increasing the public's awareness and appreciation for conservation of river resources.

7. LIST ALL PROJECT PARTNERS/COOPERATORS, THEIR ROLES AND/OR CONTRIBUTIONS

Wyoming Game and Fish Department - Project planning and design, permitting with ACOE
Bureau of Land Management - Project planning and design, NEPA
Trout Unlimited - Project contracting
WLCI - Phase II funding
TBD - Fluid Mineral Producers - Phase II funding
WWNRT – Phase II funding
The Nature Conservancy (TNC) – Phase II funding

8. PROJECT MONITORING AND REPORTING (Describe how monitoring and reporting will be done, and how it relates to the objectives)

Monitoring will be completed by WGFD, Intermountain Aquatics, BLM and/or TU including public participation in the future monitoring. The local schools will be invited to assist with some of the monitoring. The upstream and downstream landowners will also be invited to participate. The following monitoring has already been identified in order to determine if the objectives of this project were met: **Increase bedform diversity**: Monitoring method: measure constructed pool depths during base flow. **Decrease streambank erosion**: Monitoring methods: re-survey cross sections, visually assess percent of treated bank length experiencing erosion, re-predict erosion rates on treated banks using the BANCS model. **Increase riparian habitat**: Monitoring method: Measure width of living riparian vegetation on treated banks. Measure percent cover of re-established vegetation on treated banks. **Improve vertical and lateral channel stability**: Monitoring method: Re-survey cross sections post construction to monitor width to depth ratios and overlay data. Annually assess bank treatment stability and plant establishment. Monitor channel depositional features. **Increase overall habitat value**: Monitoring method: pre and post project implementation fish sampling.

9. RESEARCH POTENTIAL

The restoration project would utilize known, successful stream restoration techniques to address limiting factors and degraded habitat on the New Fork River. A possible follow up study would include collecting data regarding structural design and river responses. Some of this data would be collected during the monitoring efforts. This project would also provide foundation for habitat techniques that work in the New Fork River system. Potentially, the local schools could use this site for outdoor science field work.

10. PERMITS AND AUTHORIZATIONS REQUIRED PRIOR TO PROJECT IMPLEMENTATION (including but not necessarily limited to the following):

NOTE: Phase I Requires no Permits and Authorizations.

PERMIT OR AUTHORIZATION	REQUIRED		SUBMITTED		APPROVED	
	Yes	No	Yes	No	Yes	No
Cultural Resource Inventory	X			X		
COE Section 404 Permit	X			X		
Cooperative Agreement(s)	X		X		X	
NEPA Analysis	X					
Pesticide Application Permit		X				
Private Landowner Agreement(s)		X				
Sensitive Species Clearance	X		X			
Surface/Ground Water Permits	X		X			
T/E Species Clearance	X		X			
Other (explain)						

11. TOTAL PROJECT COST (Attach detailed budget)

Project Planning and Design $ 32,147 Phase I

Project Implementation $ 1,200,000 Phase II (estimate)

Project Operation and Maintenance $ TBD

Total Required $ Phase 1

12. MATCHING FUNDS ANTICIPATED IN CASH (list source and amount) **Expended Funds/Phase 1** WGF - $15 K (FY16), JIO-$6,000

Pending Funding approximate request amounts we may pursue and request: Pending Funding approximate request amounts we may pursue and request: WGF - $13K (FY17), WGF – 50K (FY18), TNC - $15K, WWNRT - $350K, Fluid Mineral Producers - $unknown amount, PAP0 - $75K, and other funding sources yet to be determined.

13. ANTICIPATED "IN KIND" MATCHING FUNDS (list source, valuation, and valuation method)

Trout Unlimited - $5K for survey and design contract administration. WGFD – >15K with project planning, ACOE permitting, assistance with NEPA.

14. PERCENTAGE OF FUNDING ON HAND OR COMMITTED

Phase I - ~80%

15. TOTAL PAPO FUNDING REQUESTED: $75,000

16. EXPECTED/ANTICIPATED LIFE OF PROJECT (LOP)

Perpetual _____ > 50 Years___X_____ 25-50 Years_____ < 25 Years_____

Explain Basis for Projected LOP: Design plan would address effective life of features within the given ecosystem. A project priority is long term function and low maintenance costs.

17. PROJECT TIMELINE AND ESTIMATED COMPLETION DATE. Explain :

Phase I – FY 2016
Phase II – FY 2017-2019

18. ATTACHMENTS AND SUPPORTING DOCUMENTATION

Project Design New Fork River Gas Wells Conceptual Design Plan (draft)

Letters of Support Pending – WGFD and TU

Management Plan TBD

Monitoring Plan: TBD

Relevant Past Experience Past Project Other _____ Explain:

WGF and BLM projects including development of the East Fork boat access area.

[1] Long term is defined as greater than (>) 5 years; short term is less than (<) 5 years.

19. ADDITIONAL INFORMATION FOR PAPO CONSIDERATION

1. National Trout Unlimited Agreement: PR L14AC0009 (Instrument used for Phase 1 funding)
2. Intermountain Aquatics New Fork River project implementation cost estimates
3. Letter of support – 1 attached (others pending receipt)

20. ACKNOWLEDGEMENT: This project and requested funding is subject to approval by the Pinedale Anticline Monitoring and Mitigation Board of Directors

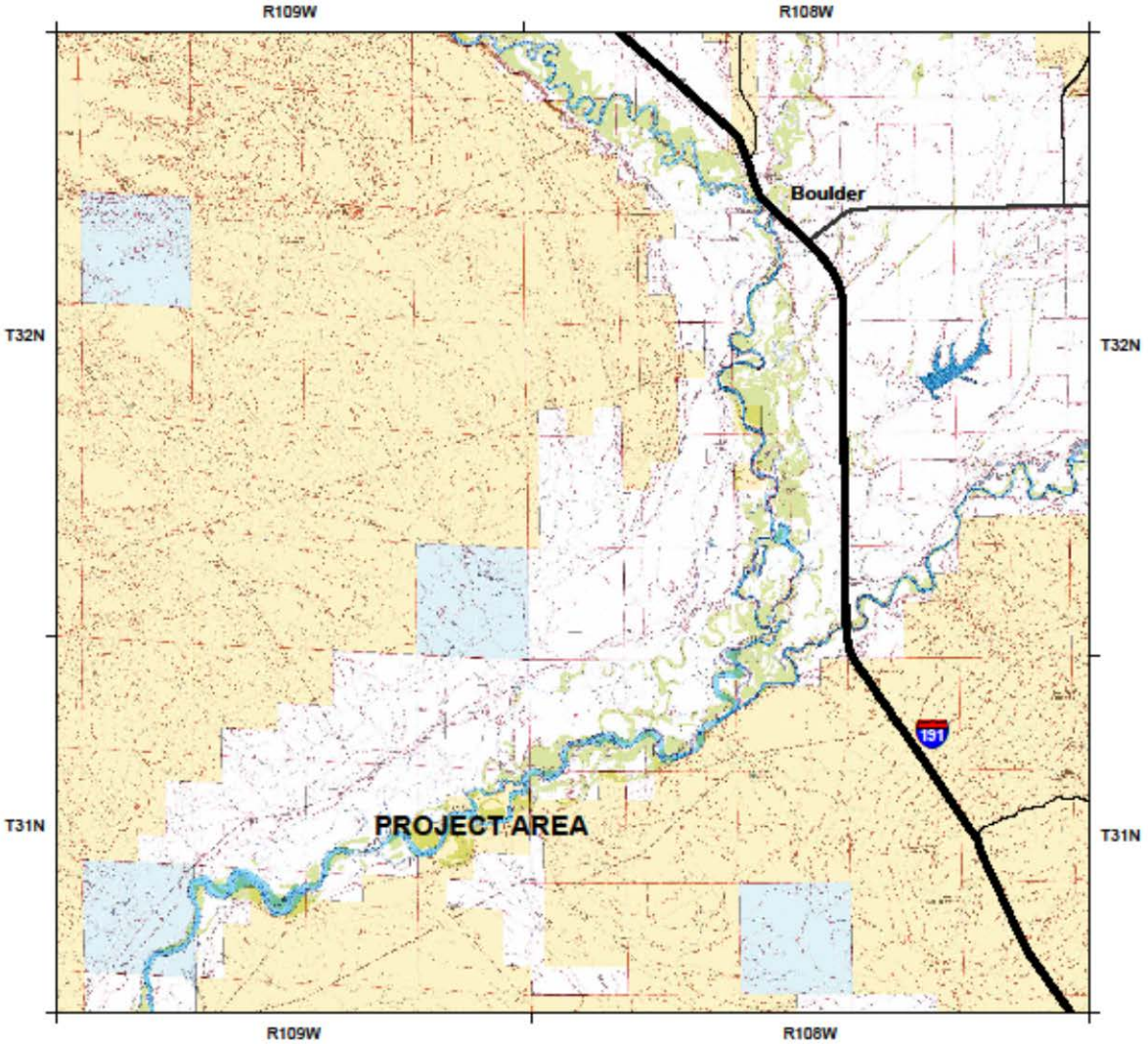
_____
Signed

_____
Printed Name

_____
Title

_____
Date

New Fork River - Streambank Restoration and Boat Access



Legend

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Forest Service
- Private
- State
- Water

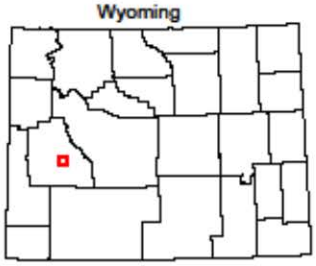
0 0.75 1.5 Miles

N

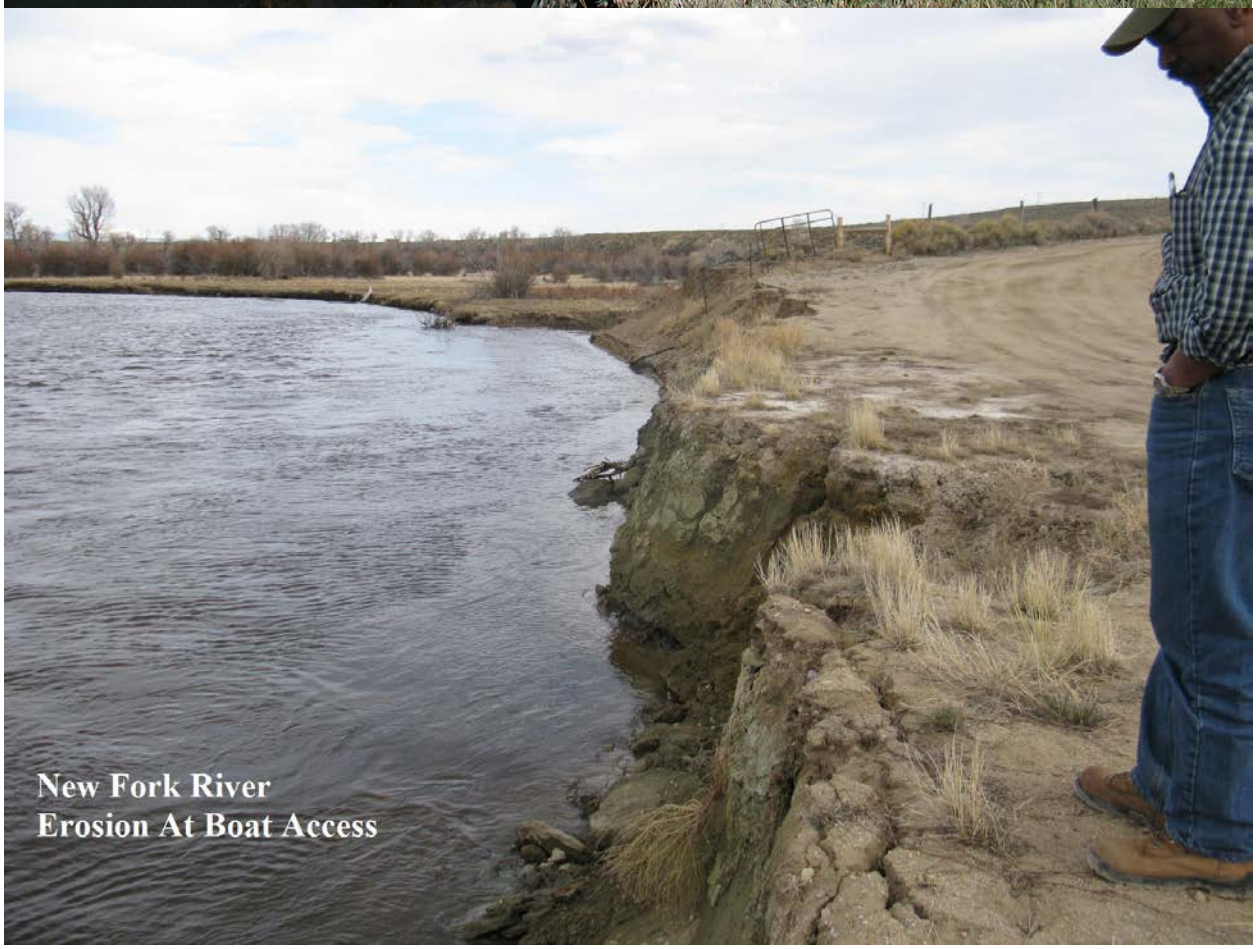
NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM.

Projection: UTM NAD83 Zone 12N

Wyoming



New Fork River
Erosion Upstream
of River Access



New Fork River
Erosion At Boat Access