

**U.S. Army Corps of Engineers
Fiscal Year 2025
Handshake Program Application**

Please review instructions before completing application!

Corps Lake/River Project Name: **Raystown Lake Project**
District / Division: **Baltimore District/North Atlantic Division**
Handshake Proposal Title: **Portable Boat Washing Station**
Corps POC Name: **Shannon Wray**
Telephone: **(814) 658 - 6812** ext.
E-Mail: **shannon.e.wray@usace.army.mil**

A. Checklist:

1. Will the Handshake funds be spent on Corps facilities and resources that are being fully maintained by the Corps? (not in outgranted parks) Yes No
 2. Will the Challenge Partnership agreement be with a non-federal public or private entity(ies)? Yes No
 3. Is the proposed activity within current authorities and contained in the annual or 5-year work plan in the approved lake project OMP? Yes No
 4. Have all of the NEPA requirements been considered for this project? Yes No
 5. I am aware the Challenge Partnership Agreement must be reviewed and approved by District Office of Counsel before sending to HQUSACE. Yes No
 6. If the full funding amount requested is not available, could a portion of this Handshake Project be completed with partial funding? Yes No
 7. I am aware that all government funds must be spent in accordance with FAR, DFAR and AFAR contracting laws and regulations, and that Handshake funds cannot be provided to the partner(s). Yes No
 8. Did you participate in a Handshake webinar in 2024 or review a 2024 Handshake webinar on the Gateway? Yes No
-

B. Handshake Funding Request (maximum \$25,000): 25,000

C. Corps Foundation Bonus Request: (maximum \$5,000): 5,000

Separate bonus funding provided by the Corps Foundation for a selected Handshake Project. Please do not include bonus funds on your overall financial spreadsheet below. Provide an explanation of how the funds will be used in the Corps Foundation Bonus section.

D. Incentive Points Category: Check the appropriate box if your application qualifies to receive bonus points on the evaluation score.

This lake/river project has never received Handshake funding. (100pts)

This lake/river project's Handshake application includes a NEW partner that the lake/river project has never worked with before. (50 pts) Please list the NEW Partner: **PA Lake Management Society**

This lake/river project's Handshake application includes a Tribal partner. (200 pts) Please list who this Partner is:

E. Describe your partnership and the proposed Handshake Partnership Project:

Project applications will be evaluated on the categories below. Please complete each section as appropriate.

Summary Statement:

Raystown is a U.S. Army Corps of Engineers (USACE) owned and operated flood control project in the Baltimore District which has missions including both recreation and environmental stewardship. The lake supports seven public boat launches, five private launches, two marinas, and sees thousands of boat per year. Like many other USACE projects, Raystown ES managers have been working to contain the spread of aquatic invasive plants like hydrilla (*Hydrilla verticillata*) and Eurasian watermilfoil (*Myriophyllum spicatum*) for over a decade with limited success. Unfortunately, Raystown recently discovered widespread populations of zebra mussels (*Dreissena polymorpha*), a filter feeding mollusk, throughout the lake. Left uncontrolled, all three of these invasive species may have detrimental impacts on waterbodies by changing the water chemistry, increasing water temps, decreasing dissolved oxygen, and reducing biodiversity. Although it is not possible to totally eradicate these invasive species within the lake, Raystown can do its part to reduce the spread of these invasive species to other waterbodies. Raystown staff are seeking partnership funding to help purchase a portable boat washing station that will allow boaters to clean their equipment while educating them about the dangers of transporting invasive aquatic hitch hikers.

Handshake Funding Cost Break Down:

Mobile Watercraft Decontamination Unit:

-Trailer, water tank, heated pressure washer, generator, hose, attachments, etc. -\$23,500

Wayside Exhibit:

-Fabrication of the sign, materials to install, and delivery- \$1,500

Handshake funds will be used to purchase a portable decontamination unit that consists of a heated pressure washer, portable generator, water storage tank, hoses with attachments all contained on a trailer that can be moved to any of the USACE or privately managed launches. An exhibit will be fabricated to accompany the portable station to provide educational information to users and observers of the washing station. See attachments for example of exhibit.

O&M Impacts:

By using our partners as a resource to relocate and operate this station there will be no additional USACE labor costs resulting from this portable station. Volunteers, fishing club members, and Student Conservatin Association (SCA) interns will move the station from location to location and provide the safety and educational assistance to users washing their boats.

The station itself will be built using individual components that typically have a lifespan lasting more than 20 years. It is recognized that there will be minimal maintenance costs for replacing hoses or washers, but the pressure washer, generator, and other components are expected to have a long life when properly maintained. A similar non-portable unit has been in use at Raystown for more than 30 years. USACE costs for maintenance and upkeep will be reduced by our partners: Pennsylvania Striped Bass Association (PSBA), Friends of Raystown Lake (FRL), and SCA, who have agreed to help with these tasks.

Partnership Value:

With the recent discovery of zebra mussels in Raystown Lake, USACE partners including the PSBA, PA Sea Grant, FRL, SCA, PA Lake Management Society (PALMS), and the Huntingdon County Visitors Bureau(HCVB) have all sought ways to reduce the spread of these invasives. One initiative that has proven successful at

reducing the spread of invasives was a pressure washing stations. These handshake funds could help make this initiative a reality by providing boaters with a reasonable way to decontaminate their boats.

This project relies heavily on partner involvement. The plan is to purchase the boat washing station and have trained educators and operators provided by the PSBA, FRL, and SCA to operate the station during busy summer weekends. Additional weekdays or days outside of peak recreation season may be added for special events or activities. Due to USACE staff limitations and other flood risk management, recreation, and environmental stewardship mission essential tasks, it would be impossible to execute this mission without additional resources, therefore reliance on the partnership value is imperative. It is important to note that all partners have a well documented history of being dedicated to preservation and and protection of Raystown's water resource.

This project also helps to protect smaller state park lakes and other local community bodies of water by providing a washing station for kayaks and other small vessels.

Recreational Value:

Raystown Lake plays a vital role in the Huntingdon County economy and neighboring communities by hosting visitors from across the country and around the world. Due to its geographic proximity, Raystown is located within an easy day trip of 5 major metropolitan areas, and it is common for visitors to travel 3-4 hours to escape the hustle and bustle of the city. This resulted in over 1.2 million visitors in FY23. Many of these visitors participate in water related activities, including skiing, swimming, kayaking, paddleboarding, fishing, canoeing, scuba diving, and others.

To make the highest impact of reducing invasive species spread this washing station will be placed at busy boat launches so visitors can clean their boats before travelling around the state or to other neighboring states. In addition, the PSBA will use the portable unit to clean association member boats after their scheduled fishing tournaments and before those tournament fishermen visit other lakes. This station will also be available to other fishing clubs for use during their tournaments. By using this washing unit to inform the public about aquatic invasive species and the negative impacts associated with aquatic hitchhikers, we can help prevent their spread to neighboring bodies of water.

Environmental Stewardship Value:

Since they were first discovered aquatic invasive species introductions into the lake have had many negative impacts to Raystown's aquatic environment. Hydrilla and milfoil inundate many of our small coves, limiting the growth of native aquatic vegetation. As these invasive species continue to proliferate, they create a dense curtain that limits water exchange, reduces dissolved oxygen, and can have other detrimental impacts to the fishery. Furthermore, the introduction of zebra mussels reduces the zooplankton as a food source for native fish species and allows light to penetrate deeper into the water column, thus allowing invasive aquatic plants to proliferate.

In addition to the detrimental impacts to the water biology, the added introduction of zebra mussels creates potential impacts to infrastructure located at Raystown Lake. Water intake structures and other critical flood control mechanical components all have the potential to be impacted by overpopulated colonies of zebra mussels. Clustered zebra mussel populations may completely block water flow into and through intake structures, making the structures ineffective.

Additional aquatic invasive species will only place more stress on this ecosystem. Additionally, Raystown wants to reduce the spread of these issues to other waterbodies. A decontamination station will limit the chance of introducing additional aquatic invasive species at Raystown, as well as limiting the spread of these species to other waterbodies.

Communication & Education Value:

Education and communication are key in promoting awareness of environmental values. The importance of protection, compliance, and restoration practices will be highlighted by the optics of the wash station, in addition to the partnership agencies and group interaction with the public. This unit and its accompanying wayside exhibit

will serve as an educational tool to promote the importance of "Clean, Drain, Dry" to stop aquatic hitchhikers. Summer education interns will teach users how to operate the unit while also providing an interactive program about aquatic invasive species. These interns will be hired through a partnership with The Friends of Raystown Lake and Juniata College.

Beyond visibility at our boat launches, partnering groups, including the HCVB and The FRL, will help promote public awareness about stopping aquatic hitchhikers by sharing information on social media outlets, public information websites, and tourism guides with an annual readership of more than 1 million Raystown enthusiasts. Through these outlets we can also advertise when and where this unit and accompanying educational displays will be available for public use.

Supporting Diversity, Equity, Inclusion, and Access Goals:

Raystown would be the first USACE Baltimore District project to purchase and use a boat washing system. This project will allow Raystown to work with other federal, state, local and private entities to educate the public about aquatic invasive species, and the importance of stopping their spread to other bodies of water. This project will support the Clean, Drain, Dry National Campaign on Invasive Species, and will provide on-the-job experience for students interested in conservation and recreation career fields. Beyond providing valuable experiences to our volunteers, we also have the opportunity to educate visitors from various diverse backgrounds, age groups, and other geographic regions about our environmental stewardship endeavors.

Overall, this Handshake project contributes to the USACE Recreation Strategic Plan efforts highlighted by the value and roles of "Where People and Water Meet", "Safe and Accessible", "Resource Protection", "Healthy Communities", "Attractive Partner", and "Geographic Distribution". Due to financial constraints, only one unit will be purchased under this program at this time. If this project is a success, additional stations may be sought.

Corps Foundation Bonus Cost Break Down:

Since Raystown does not currently own or operate a mobile decontamination unit there is an opportunity for new public outreach and education with this resource. An SCA intern would be included to help with the initial education and transportation of the system to boat launches. The intern would teach boaters how to use the equipment and the importance of "Clean, Drain, Dry" to stop aquatic hitchhikers. One SCA intern costs \$10,000; if we are selected for the Corps Foundation funding these resources would be used to supplement Raystown Lake's financial commitment to support an SCA intern.

Conclusion:

With partnership resources, this project has the potential to be a long-term success at Raystown. This project will provide visitors with the opportunity to wash invasives from their boats, thus helping to reduce the potential spread of these invasives to nearby bodies of water. It also protects water intake infrastructure, promotes environmental stewardship, and improves the recreational experience for all visitors to the Raystown Lake Project.

NOTE: To show foresight, commitment, and planning, it is REQUIRED to include maps/pictures/plans/specs as part of your overall package. Failure to include supporting attachments will result in points deductions.

	Local Corps Office	Handshake Funds	Partner 1: Friends of Raystown Lake	Partner 2: PA Striped Bass Association	Partner 3: PA Sea Grant	Partner 4: SCA
Salaries	\$10,000	N/A	\$0	\$0	\$0	\$0
Travel	\$600	N/A	\$0	\$0	\$0	\$0
Materials and Supplies	\$1,000	\$25,000	\$0	\$0	\$2,000	\$0
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	N/A	N/A	\$0	\$0	\$0	\$0
Personal Property	N/A	N/A	\$0	\$0	\$0	\$0
Volunteer	N/A	N/A	\$0	\$0	\$0	\$0
In-Kind Services	N/A	N/A	\$7,500	\$5,000	\$0	\$7,500
Other (explain below)	\$800	\$0	\$0	\$0	\$0	\$0
Total	\$12,400	\$25,000	\$7,500	\$5,000	\$2,000	\$7,500
Share of Total Cost	19.7%	39.7%	11.9%	7.9%	3.2%	11.9%
	59.5%					

	Partner 5: Huntingdon County Visitors Bureau	Partner 6: PA Lake Management Society	Partner 7	Partner 8	Partner 9	Partner 10
Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	\$0	\$0	\$0	\$0	\$0	\$0
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$0	\$0	\$0	\$0	\$0	\$0
In-Kind Services	\$2,500	\$1,000	\$0	\$0	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$2,500	\$1,000	\$0	\$0	\$0	\$0
Share of Total Cost	4.0%	1.6%	0.0%	0.0%	0.0%	0

	Partner 11	Partner 12	Partner 13	Partner 14	Partner 15	Total
Salaries	\$0	\$0	\$0	\$0	\$0	\$10,000
Travel	\$0	\$0	\$0	\$0	\$0	\$600
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$28,000
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	\$0	\$0	\$0	\$0	\$0	\$0
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$0	\$0	\$0	\$0	\$0	\$0
In-Kind Services	\$0	\$0	\$0	\$0	\$0	\$23,500
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$800
Total	\$0	\$0	\$0	\$0	\$0	\$62,900
Share of Total Cost	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Worksheet Cost Breakdown:

Raystown Lake will provide \$10,000 to fund an SCA intern for the summer to help move and operate the mobile decontamination unit and educate the public about the importance of using the unit after boating in aquatic invasive contaminated waters. Additionally, Raystown will cover the cost of diesel fuel to operate the generator (\$1,000), and gasoline to power the truck to transport the unit (\$600). The “other” cost for both the handshake partnership and corps funds will be used to design, fabricate, and install a way-side kiosk to educate the public about the dangers associated with aquatic invasive species, and what to do to stop aquatic hitch hikers. Signs are a good tool, but an exhibit can provide more detailed information to the public when an interpreter is not present.

The Friends of Raystown Lake will publish educational information about the mobile decontamination unit, and its availability to the public at no cost on their Facebook and webpages. They will also provide a team of two members to transport and staff the unit during the weekends. They will advise members of the public how to use the unit and relay our message to prevent the spread of aquatic invasive species. Total cost of these in-kind services is \$7,500.

The PA Striped Bass Association will provide in-kind services by having group members move and operate the unit on the weekends, when other staff or SCA are not available. They will also show the public how to use the unit and providing education. They have also agreed to use this unit during their fishing tournaments which occur approximately 12 times per year. Having this large fishing club use this unit at their tournaments will help reduce the spread aquatic hitch hikers’ to neighboring bodies of water. Total value of these in-kind services is estimated at \$5,000.

PA Sea Grant has a large knowledge base related to aquatic invasive plants and animals and the importance of “Clean, Drain, Dry”. They have agreed to provide educational materials and prizes that we can provide to the public, and signage that we can display at our boat launches. Total cost of these materials is \$2000.

SCA interns cost approximately \$10,000 for one intern to work 16-18 weeks, but the value that they add back to the project is approximately \$17,500 based on the number of hours that they work per year and the volunteer rate of their hours.

The Huntingdon County Visitors Bureau is a professional agency that has agreed to advertise information about the mobile decontamination unit and aquatic invasive hitch hikers through their various networks. This could include their webpage and catalog of the area that is published each year.

The PA Lake Management Society (PALMS) is a professional organization that is made up of individuals in the private industry and other government agencies. Their partnership will provide expertise about these decontamination systems and insights about how to educate the public on this topic. This is also a mutual partnership, where we will be able to provide information to PALMS about purchasing, implementation, and maintenance associated with the decontamination station. This information will be used for them to update their Lake and Watershed Management Handbook for other people to use before they purchase a unit.



US Army Corps
of Engineers®
Baltimore District

INVASIVE INVADERS!



WHAT IS AN INVASIVE?

Invasive species are non-native plants or animals that disrupt local ecosystems by outcompeting native species for resources. They can be aquatic (found in water) or terrestrial (found on land) and are often characterized by their ability to...

Outspread: They can spread to new areas more rapidly than natives

Outgrow: They can grow faster than natives

Outbreed: They can reproduce quicker and in larger numbers than natives

Outmaneuver: They can easily adapt to different soil types, climates & food

Out-Eat: They can quickly exhaust food sources, leaving little for natives

Outcompete- They have no natural predators to keep their populations in check, so they easily **outcompete** native species for water, sunlight, space, etc.

WHAT IS THE BIG DEAL?

Invasive species have negative impacts on the environment, economy, community, and YOUR recreation experience.

Hydrilla, one of the most infamous aquatic invasive at Raystown, illustrates this well. Hydrilla grows in dense mats that (initially) provide fish habitat, but quickly grows so thick that it depletes oxygen in the water, creating an unlivable environment where fish once thrived. Not to mention, you can't move a boat through it, let alone a fishing lure... Say goodbye to your favorite fishing and swimming spot!

WHAT CAN YOU DO TO HELP?

Once rooted in a suitable habitat, eradication of invasive species is virtually impossible. Management techniques and treatment methods focus on **REDUCTION & PREVENTION**, with the long-term goal of decreasing population size to minimize negative impacts and prevent the spread within the lake & other bodies of water. **Preventing the spread depends on YOU.**

Before leaving the lake, remember to...

CLEAN

all plants, mud, debris off your boat, trailer, and gear

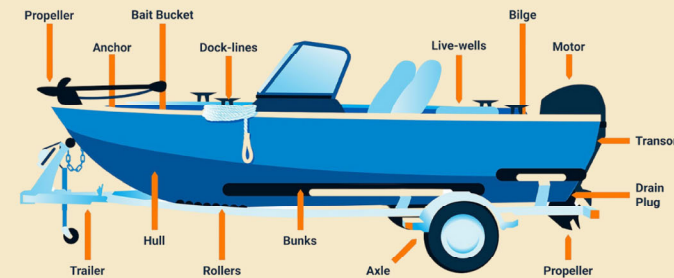
DRAIN

all water from boat, motor, live wells, and any compartments.

DRY

all equipment for at least 1 week or wash with hot, soapy water before visiting another water body

& THOROUGHLY INSPECT THESE PARTS OF YOUR BOAT!



Below: Zebra Mussels (*dreissena polymorpha*) clustered on hydrilla (*hydrilla verticillata*), both of which are aquatic invasive species at Raystown Lake.



Below: Zebra Mussels have fingernail-sized (less than 2 inches), D-shaped shells with alternating light and dark brown, zig-zag bands



(NOT SO)
FUN FACT:
Hydrilla can grow up to 1 inch PER DAY!!!

1. PROJECT INFORMATION

Project Name: **Seven Points: Mobile Boat Washing Station**

Date of Review: **10/4/2024 03:09:36 PM**

Project Category: **Pest Control (control of animal and plant pests), Other**

Project Area: **2.60 acres**

County(s): **Huntingdon**

Township/Municipality(s): **PENN TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **HUNTINGDON**

Watersheds HUC 8: **Raystown**

Watersheds HUC 12: **Raystown Lake-Raystown Branch Juniata River-Juniata River**

Decimal Degrees: **40.380899, -78.073897**

Degrees Minutes Seconds: **40° 22' 51.2364" N, 78° 4' 26.274" W**



2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	Conservation Measure	No Further Review Required, See Agency Comments
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	Potential Impact	MORE INFORMATION REQUIRED, See Agency Response

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Seven Points: Mobile Boat Washing Station





-  Buffered Project Boundary
-  Project Boundary

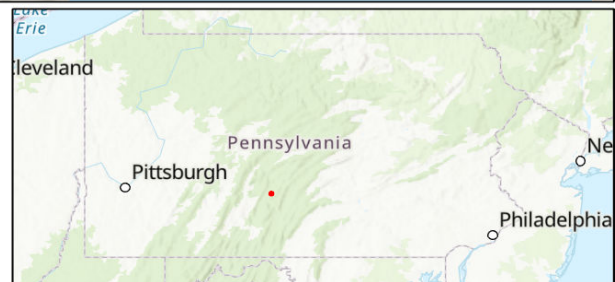


Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Seven Points: Mobile Boat Washing Station



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Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

Conservation Measure: Potential impacts to state and federally listed species which are under the jurisdiction of both the Pennsylvania Game Commission (PGC) and the U.S. Fish and Wildlife Service may occur as a result of this project. As a result, the PGC defers comments on potential impacts to federally listed species to the U.S. Fish and Wildlife Service. No further coordination with the Pennsylvania Game Commission is required at this time.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

Information Request: The proposed project is located in the vicinity of northern long-eared bat spring staging/fall swarming habitat. Enter project information, including the Pennsylvania Natural Diversity Inventory receipt number, into the U.S. Fish and Wildlife Service's Information for Planning and Consultation tool (IPaC) (<https://ecos.fws.gov/ipac/>). Follow the Northern Long-eared Bat Rangewide Determination Key step-by-step process to review this projects's potential effect on northern long-eared bats.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).

*If information was requested by USFWS, applicants must email, or mail, project information to IR1_ESPenn@fws.gov to initiate a review. USFWS will not accept uploaded project materials.

Check-list of Minimum Materials to be submitted:

___ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

___ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

___ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

___ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

___ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: _____
Company/Business Name: _____
Address: _____
City, State, Zip: _____
Phone:(_____) _____ Fax:(_____) _____
Email: _____

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

applicant/project proponent signature

date

EQUIPMENT SPECIFICATIONS

WATERCRAFT DECON UNIT (AIS) ROYCE-TR-AIS TRAILER

List Price: \$23,500

TYPE

Hot water, high pressure, gasoline powered, stationary washer. Machine shall be capable of operating on fresh water. The machine shall be fully automatic with appropriate safety controls. This machine is ETL listed. Must conform to UL standard 1776 for pressure washers. All equipment built in an ISO-9001; 2008 registered factory.

GENERAL SPECIFICATIONS

Discharge	4.7 GPM
Pressure	3500 PSI
Pump RPM	1360
Engine	660 cc Electric Start Honda 4000
Generator	2000 Watts
BTU	450,000

ENGINE

The V-Twin, OHV, 4-stroke gasoline engine comes with a twin-barrel carburetor, air oil cooler, transistorized magneto ignition system and a 17 amp charging system. It clears strict CARB and EPA emissions regulations.

HIGH PRESSURE PUMP

Pump is tri-plex with ceramic plunger, oil bath crankcase with forged brass head, rated 3500 PSI (241 bar). Pump equipped with U-seals with temp rating of 185°F. Pump will be fed by a 110v 5 gpm feed pump.

GENERATOR

2000 watt, rated AC amps 33.3 / 16.7 volts 120 / 4-20 amp 120v nema 5-20 R3600 rpm.

UNLOADER VALVE

The pressure washer shall be equipped with a pressure trapping unloader valve rated for 4000 PSI (275 bar) and 7.8 GPM (30 lpm).

DRIVES/PUMPS

Belt drive system with cast iron pulley and adjustment bolts for proper belt tension and alignment. All belts to be covered by safety machine cover. All belts to be of notched design for maximum performance.

PUMP RAILS

Tru-track, 10 ga. steel; all welds are per ASTM welding standards, polyester powder coated paint for maximum corrosion resistance.

CONTROLS:

Machine shall have control panel with the following:

- Hour meter with tachometer and service monitor.
- Control panel can be relocated easily, from end to side of machine, to meet operator preference
- Lexan operating instructions and safety information in English, French and Spanish, attached by a high strength adhesive.
- Burner control switches.
- Adjustable thermostat
- Metered detergent valve
- Low fuel burner shut-off switch
- Engine choke
- Engine start-stop
- Engine choke



HEATING COIL

Schedule 80 A53 cold formed DuraCoil, with a material thickness of .147" (4 mm), overall length 110 ft. (34 m), pipe dimension .840" OD (21 mm), .546" ID (14 mm). Welding done to ASME standards. The heating coil shall be covered by an aluminized steel inner wrap and insulated with fiberfrax ceramic blanket, No. 6 density, 1" (3 cm) thick. Outer wrap of heating coil to be constructed of stainless steel.

SHUR-TEMP

(Customized for Aquatic Invasive Species) Shall be equipped with a device that maintains the operators set/determined temperatures at +/- 3 Degrees Fahrenheit.

BURNER ASSEMBLY

Continuous heating coil type, diesel/kerosene fired. TYPE: Class 6421 01 - fuel burning equipment (oil) - units - commercial/industrial. Forced air, automatic ignition, of sufficient capacity to provide 150°F (66°C) temperature rise. Burner fuel pump shall be equipped with safety fuel solenoid and regulator for safety and fuel pressure adjustment.

FUEL FILTER WATER SEPARATOR

The burner shall be equipped with a replacement element type fuel filter/ water separator with visual check and drain provision.

HIGH TEMPERATURE CONTROL

Shall be of the adjustable thermostat type located at discharge of coil with an operating temperature setting at 86°-302°F (30°-150°C). This safety control shall only control the fuel solenoid, not the burner assembly, for safety and dependability.

RUPTURE DISK

A rupture disk shall be located at the discharge port of the coil for over pressurization protection.

SAFETY FLOW SWITCH

Shall be located on cold water side of heating coil to prevent thermal damage. This safety switch shall be hermetically sealed to prevent moisture damage.

WATER SUPPLY SYSTEM

Reinforced polyethylene water tanks with automatic float shut-off valve shall be permanently mounted to machine to supply water to high pressure pump. A mesh in-line filter shall be installed to adequately protect the high pressure pump.

EASY!Force TRIGGER GUNS Patent Pending

Insulated safety shut-off spray gun supplied shall include ergonomic technology and be rated at 10.5 GPM (40 lpm), 5000 PSI (345 bar), and 300°F (149°C). Constructed from fiber-glass-reinforced polyester with brass and stainless valves and seats.

WANDS

A 42" (107 cm) angled stainless steel wand with built-in variable pressure control valve. Insulated grab handle and wand for operator protection.

HOSES

All hoses shall be 3/8" ID x 100' R2 double steel braid type meeting or exceeding SAE100R2 performance specification. Hose ends shall be equipped with swedge and safety protection collars; 24" on operator gun side. Rated at 5800 PSI at 275°F.

HOSE REELS

Two hose reels shall be supplied. Heavy gauge construction, gloss powder coat, high pressure double swivel seals; one for high pressure and one for low pressure.

NOZZLES

As required by UMPS's III (Uniform Minimum Protocols and Standards) the appropriate, white color, identifiable high pressure nozzles for single spray gun operation shall be supplied at 40° flat spray pattern. The nozzles shall be of a hardened 420 stainless steel material, with an interlock coupler nipple made of annealed 303 stainless steel with 80 Rockwell hardness rating.

CONNECTIONS

Quick coupler with stainless steel support balls, 4,000 PSI rated.

AQUATIC INVASIVE SPECIES DECONTAMINATION TOOLS

- 1= Thru Hull Device, Insulated w/ AIS-QC Part # ROYCE-AIS-001
- 1= Under Hull Device, 4 Nozzle w/ AIS-QC Part # ROYCE-AIS-003
- 1= Water Craft Diffuser w/ AIS-QC Part # ROYCE-AIS-005
- 1= Personal Watercraft Tool, Female w/ AIS-QC Part # ROYCE-AIS-007
- 1= Personal Watercraft Tool, Male w/ AIS-QC Part # ROYCE-AIS-009
- 1= AIS Flush, Inboard Hi-Temp Part # ROYCE-AIS-011
- 1= AIS Flush, Pro Hi-Temp Part # ROYCE-AIS-013
- 1= Muffs, Rectangle Hi-Temp Part # ROYCE-AIS-015
- 1= Muffs, Round Hi-Temp Part # ROYCE-AIS-017
- 1= Muffs, Volvo-Penta Hi-Temp Part # ROYCE-AIS-019
- 1= Muffs, Mercury Hi-Temp Part # ROYCE-AIS-021
- 1= Muffs, Dual Feed Hi-Temp Part # ROYCE-AIS-023
- 1= EZ Force Gun, with AIS-QC Part # ROYCE-AIS-025
- 1= Whip Hose, 3' with AIS-QC Part # ROYCE-AIS-027

ONBOARD AIS TOOL STORAGE

Shall be equipped with lockable tool box for storage of the Aquatic Invasive Species (AIS) Tools.

FRAME

Machine shall be surrounded/protected on all sides by a welded steel 1-1/2" tube frame/cage assembly. Components to be located for service/inspection accessibility. Frame is polyester powder coated for maximum corrosion resistance. Fuel tank to be enclosed in the frame as well. The frame and power platform to be separated by vibration isolators. Stainless steel wrap.

LIGHTS

Brake, signal and marker lights are recessed in the frame and are 12 Volt DOT approved. License plate holder houses an indicator light to meet DOT regulations.

AXLES / SPRINGS / BRAKES

Dual factory installed Leaf spring axles are rated at 3500 lbs class II. Factory installed dual electric brakes. "Break-away" kit includes a stand-alone 12V battery.

TIRES

205 / 75 / R15" tires with 15" White steel rims, factory installed and spare tire configuration.

JACK

The 1500 lbs screw-type jack rotates from the towing position to the vertical position by operating the spring-loaded locking mechanism. An enclosed tube prevents sand and dirt from coming in contact with the precision miter gears and the heavy-duty Acme screw. It has a bright, zinc-plated finish, as well as a polypropylene wheel and four-bolt mounting system.

TONGUE COUPLER

2-inch or 2 5/16-inch ball coupler for quick and easy hook up of the trailer. Dual 5/16-inch chains are also included for additional safety.

WATER TANKS

Trailer features a 330-gallon white High-Density Polyethylene Water Tank comes standard with the trailer and features a 12-inch access port plus a 1 1/2-inch drain valve, 3/4-inch float valve and a 50-mesh inlet strainer and large 2" FPT drain fitting. Tank walls are translucent for level viewing and equipped with gallon indicators Tank includes a durable inlet float valve to prevent overfilling and an extra 3/4" bulkhead for field installed pump bypass.

WATER FILTER

A 1" T-Line strainer with 20 mesh stainless screen is mounted in between the tank and pressure washer.

WAND STORAGE

Wand storage bracket with locking latch is located behind the wheel well.

FUEL TANKS

Gasoline (10 gallon) and diesel (10 gallon) tanks feature elevated fuel lines to prevent debris in fuel from causing damage.

AVAILABLE OPTIONS (Trailer)

- Hydraulic Surge Breaks with hydraulic break away kit
- Front rock guard
- 15" Chrome steel rims
- 2-5/16" Ball hitch coupler

TRAILER CERTIFICATION

Trailer to be certified to the NATM and NHTSA requirements.

AQUATIC INVASIVE SPECIES DECALS

Trailer shall be affixed with two each of the following vinyl decals:

"Clean * Drain * Dry"

"Watercraft Decontamination Unit"

"Department Logos" as determined by Owner

DIMENSIONS

Trailer Only: 178"L x 80"W x 62"H
Pressure Washer Only: 48"L x 32"W x 44"H

ROYCE-TR-AIS

Mobile Watercraft Decontamination



ROYCE-TR-AIS Tandem Axle Trailer

Shown with optional Fuel Tool box & Chrome Wheels

Royce Industries is a leader in Aquatic Invasive Species (AIS) decontamination. The Royce TR-AIS trailer offers many features to help make watercraft decontaminations much easier in a mobile unit.

- **Wheel and axle assembly**

features an Industrial Undercarriage leaf-spring suspension of up to 3,500 lbs. per axle and 14-inch, white spoke wheels (shown with optional chrome wheels and fenders).

- **Dual-axle trailers** come with standard Electric Brakes with Break Away Kit or optional hydraulic breaks.

- **Two 3-way ball valves** make it easy to Switch Water Sources from the holding tank to direct water feed from a hose faucet.

- **Durable Steel Cage** holds the water tank and features a pressure washer wand holder for quick and ready cleaning accessibility.

- **330-gallon white High-Density Polyethylene Water Tank** comes standard with the trailer and features a 12-inch access port plus a 1 1/2-inch drain valve, 3/4-inch float valve and a 50-mesh inlet strainer.

- **Made of extra-durable 2-by-3 inch structural tubing** and covered with a powder-coated epoxy black finish for

weather protection; this Heavy-Duty Chassis features lighted license plate holder and recessed tail lights; all electrical wiring is recessed within the tubular frame.

- **The second Hose Reel (not shown) holds up to 150 ft. of hose** and quick connects to chassis.

- **Made of durable 14 gauge steel**, Optional Tool Box and Extra Fuel Tank doubles as a generous tool storage with safety hold-open lid, and a 50-gallon tank for extra fuel; includes standard 2 1/4-inch gas

tank filler opening; slosh-proof baffled reservoir; gasoline outlet is above gas line; 2-inch NPT opening for a transfer pump (not included) to pump fuel to either the equipment or other vehicles.

- **Made to handle up to 1,500 lbs**, the swivel jack Trailer Tongue Assembly, with a 2-inch or 2 5/16-inch ball coupler for quick and easy hook up of the trailer. Dual 5/16-inch chains are also included for additional safety.

Call Calvin for special pricing on this AIS trailer!

ROYCE-TR-AIS

Mobile Watercraft Decontamination



Why Choose Royce?

Royce's involvement in the area of AIS mitigation began in early 2008 shortly after the presences of Quagga Mussels were discovered in Lake Mead. Immediately following their discovery in Lake Mead; Utah, Idaho and Colorado began their "Don't Move a Mussel" and "Stop Aquatic Hitchhikers!" prevention efforts. Since Royce has business operations in each of these states, it became clear that their participation in this movement was paramount.

Royce Mobile Decontamination Systems have been constructed to move the boating public thru your agencies program as efficiently and safely as possible while at the same time protecting our waterways from the spread of AIS. Trailers are made of extra-rugged 2-by-3 inch structural tubing. The wheel and axle assembly feature leaf-spring suspension of up to 3,500 lbs. per axle and 14-inch, white spoke wheels. A powder-coated epoxy finish gives the entire package added weather protection.

ROYCE-TR-AIS Mobile Watercraft Decontamination System Specifications

Pressure Washer System

Volume	4.7 GPM
Pressure	3,500 PSI
Engine	Honda GX660, 688cc
Engine Fuel	Gasoline (5 gallon tank)
Pump	LT (1360 RPM)
Generator	2,000 watts/120VAC
Gun Control	EASY!Force Ergonomic Trigger
Wand Assembly	Variable pressure wand with 100' hose
Detergent	Downstream detergent injector

Heating System

Pre-Heating	Patent-pending Trans-Heat Technology
Coil	1/2" Schedule 80
Burner Fuel	Diesel/kerosene/fuel oil (7 gallon tank)
BTUs	450,000
Shur-Temp	Temperature Customization System for Aquatic Invasive Species Decon Programs

Included Options & Accessories

Mounting Kit Assembly 100' x 3/8" R2 High Pressure Hose
 High Pressure Hose Reel (100' cap.) 50' x 3/4" Contractor Hose
 Low Pressure Hose Reel (100' cap.)

Trailer

Water Tank Capacity	330 gallons
Load	7,000 lb. capacity
Trailer Axles	Tandem, 3,500 lbs. each with electric brakes
Wheels	15-inch wheels, ST205/75/R15 tires
Swing-Away Tongue	3,500 lb. capacity with 2 inch ball coupler
Swivel Jack	1,500 lb. capacity
Safety Chains	Dual 5/16 inch steel link with latching hooks
Lighting	DOT Approved Recessed lights, license plate holder
AIS Decals	"Clean * Drain * Dry" "Watercraft Decontamination Unit" "Department Logos"
Dimensions	178"L x 80"W x 62"H
Dry Weight	1,920 lbs.