

HACCP Step 1 – Activity Description

Activity Description	
Facility: Various Tulsa District Lakes	Site: Reservoir
Project Coordinator: Everett Laney	Activity: Buoy Work
Site Manager: Lake Manager	
Address: Tulsa District Office 1645 S. 101 st East Ave Tulsa, OK 74128	
Phone: (918) 669-7411	
Project Description	
i.e. Who; What; Where; When; How; Why	
<p>Project personnel install and maintain buoys and buoy lines both in the reservoir and below the dam in the outlet channel. This work is typically performed with a work barge but may be accomplished with other types of vessels. Buoy maintenance is necessary to ensure public safety. This description assumes that the boat is kept at the Project Office compound on a trailer and has the potential to be transported to other Project Offices for use.</p> <p>The species listed in this HACCP Plan are of primary concern to the Tulsa District. For a detailed list of additional species, refer to your state’s Aquatic Nuisance Species (ANS) Management Plan.</p> <p>Kansas: http://www.kdwp.state.ks.us/news/Fishing/Aquatic-Nuisance-Species/KS-Nuisance-Species-Plan</p> <p>Oklahoma: http://anstaskforce.gov/State%20Plans/OK/OKLAHOMA%20ANS%20PLAN%20JULY08.pdf</p> <p>Texas: Currently the Texas ANS Management Plan is under development. http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_pl_t3200_1221_draft.doc</p>	

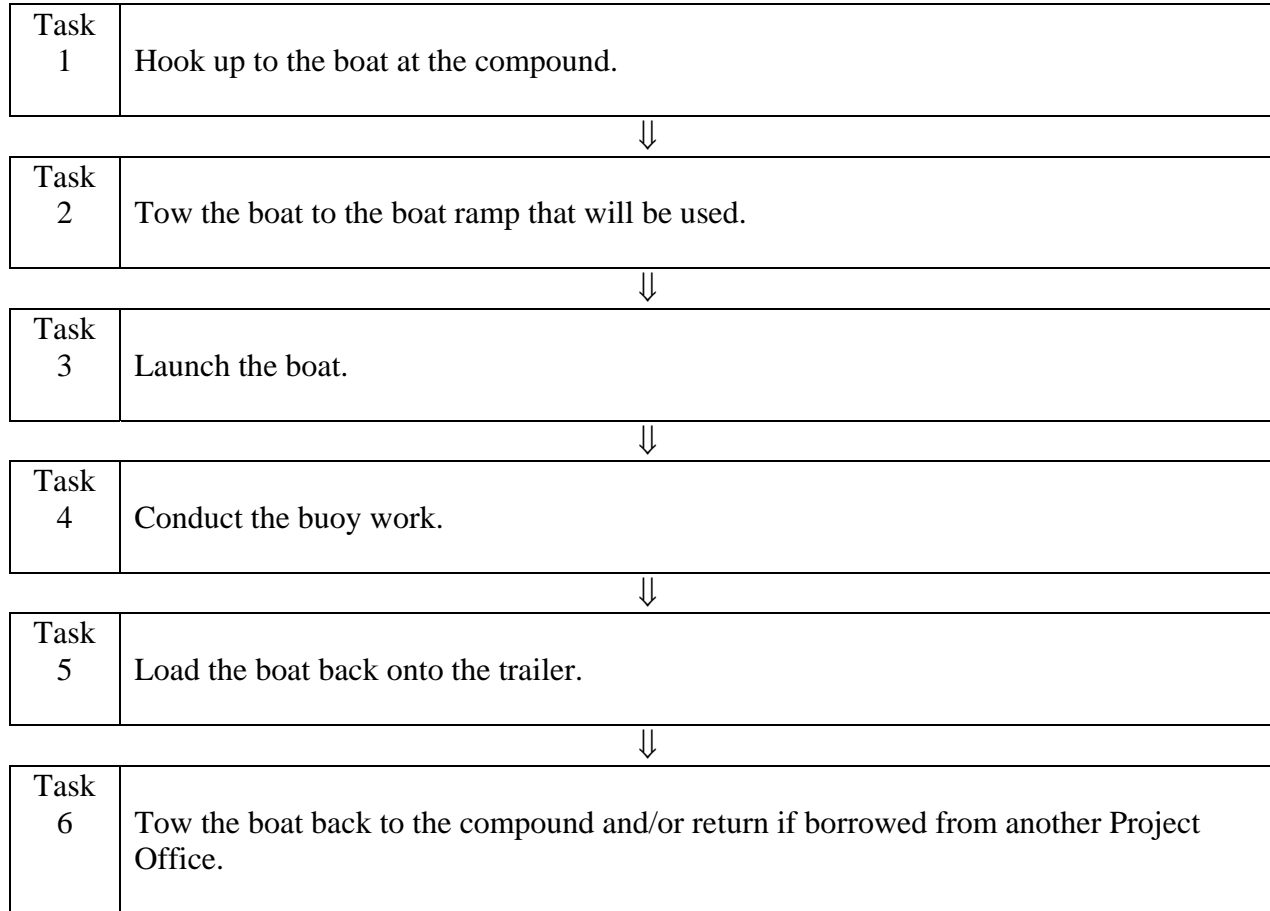
HACCP Step 2 – Identify Potential Hazards

(to be transferred to column 2 of HACCP Step 4 – Hazard Analysis Worksheet)

Hazards: Species Which May Potentially Be Moved/Introduced
Vertebrates:
Invertebrates: Zebra mussels
Plants: Eurasian milfoil Alligator weed Common reed – genus <i>Phragmites</i> Algae (golden)
Other Biologics (e.g. disease, pathogen, parasite):
Others (e.g. construction materials, etc.):

HACCP Step 3 – Flow Diagram

Flow Diagram Outlining Sequential Tasks to Complete Activity/Project
Described in HACCP Step 1 – Activity Description
(to be transferred to column 1 of the HACCP Step 4 – Hazard Analysis Worksheet)



HACCP Step 4 - Hazard Analysis Worksheet

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
Task 1 Hook up to the boat at the compound	Vertebrates	No			No
	Invertebrates Zebra mussels	Yes	Zebra mussels could have gotten on the boat during the previous work.	Check the boat for zebra mussels. Check to make sure the bilge water has been previously drained. Check to assure that the lower unit(s) of the out board does not have any water remaining.	Yes If the boat is to be transported from infested water to non-infested water.
	Plants Eurasian milfoil Alligator weed Common reed – genus <i>Phragmites</i> Algae (golden)	Yes	Plants could have gotten on the boat or trailer during the previous usage.	Physically examine the boat, trailer, and pickup for weeds and remove any that are seen.	Yes If the boat is to be transported from infested water to non-infested water.
	Others	No			No
Task 2 Tow the boat to the boat ramp	Vertebrates	No			No
	Invertebrates	No			No
	Plants	No			No
	Others	No			No

HACCP Step 4 - Hazard Analysis Worksheet (continued)

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
Task 3 Launch the boat	Vertebrates	No			No
	Invertebrates	No			No
	Plants	No			No
	Others	No			No
Task 4 Conduct the buoy work	Vertebrates	No			No
	Invertebrates Zebra mussels	Yes	Zebra mussel adults and veligers could get on the boat during the buoy work.	None	No
	Plants Eurasian milfoil Alligator weed Common reed – genus <i>Phragmites</i> Algae (golden)	Yes	Plants could get on the boat while it is on the water.	Avoid driving through weed beds and other vegetation.	No
	Others	No			No

HACCP Step 4 - Hazard Analysis Worksheet (continued)

1 Tasks (from HACCP Step 3 - Flow Diagram)	2 Potential hazards identified in HACCP Step 2	3 Are any potential hazards probable? (yes/no)	4 Justify evaluation for column 3	5 What control measures can be applied to prevent undesirable results?	6 Is this task a critical control point? (yes/no)
Task 5 Load the boat back on to the trailer	Vertebrates	No			No
	Invertebrates Zebra mussels	Yes	Zebra mussel adults and veligers could have gotten on the boat and trailer during usage.	Drain the bilge. Lower the motor(s) so that the water in the lower unit(s) will completely drain.	Yes
	Plants Eurasian milfoil Alligator weed Common reed – genus <i>Phragmites</i> Algae (golden)	Yes	Plants could have gotten on the boat and trailer during usage. Algae could have gotten into the bilge, lower unit(s), and trailer during usage.	Examine the boat, trailer, and pickup and remove any plants that are seen. Drain the bilge. Lower the motor(s) so that the lower unit(s) will completely drain.	Yes
	Others	No			No

HACCP Step 4 - Hazard Analysis Worksheet (continued)

<p align="center">1 Tasks (from HACCP Step 3 - Flow Diagram)</p>	<p align="center">2 Potential hazards identified in HACCP Step 2</p>	<p align="center">3 Are any potential hazards probable? (yes/no)</p>	<p align="center">4 Justify evaluation for column 3</p>	<p align="center">5 What control measures can be applied to prevent undesirable results?</p>	<p align="center">6 Is this task a critical control point? (yes/no)</p>
<p>Task 6 Tow the boat back to the compound and/or return if borrowed from another Project Office.</p>	<p>Vertebrates</p>	<p>No</p>			<p>No</p>
	<p>Invertebrates Zebra mussels</p>	<p>Yes</p>	<p>Zebra mussel adults and veligers could still be on the boat, trailer, and pickup.</p>	<p>Using at least 140°F water, pressure wash at the boat, trailer, and pickup. Using at least 140°F water, pressure wash the anchor and rope (if used) and/or allow anchor storage area to be completely dried before using again.</p>	<p>Yes If the boat is to be transported from infested water to non-infested water for use.</p>
	<p>Plants Eurasian milfoil Alligator weed Common reed – genus <i>Phragmites</i> Algae (golden)</p>	<p>Yes</p>	<p>Plants could have been overlooked at the boat ramp.</p>	<p>Pressure wash the boat, trailer, and pickup. Pressure wash the anchor and rope (if used) and/or allow anchor storage area to be completely dried before using again.</p>	<p>Yes If the boat is to be transported from infested water to non-infested water for use.</p>
	<p>Others</p>	<p>No</p>			<p>No</p>

HACCP Step 5 – HACCP Plan Form

<p align="center">HACCP Plan Form (all CCP's or "yes's" from column 6 of HACCP Step 4 – Hazard Analysis Worksheet)</p>								
Critical Control Point (CCP)	Significant Hazard(s)	Limits for each Control Measure	What	Monitoring			Evaluation & Corrective Action(s) (if needed)	Supporting Documentation (if any)
				How	Frequency	Who		
<p>Task 1</p> <p>Hook up to the boat at the compound</p>	Zebra mussels Eurasian milfoil Alligator weed Common reed – genus <i>Phragmites</i> Algae (golden)	Zero tolerance on the boat and trailer.	All areas of the boat and trailer.	Visual inspection and feeling with hands.	Before each use if the boat has been transported from infested water to non-infested water for use.	Boat operator	Check the boat and trailer before each use.	

HACCP Step 5 – HACCP Plan Form (continued)

<p align="center">HACCP Plan Form (all CCP's or "yes's" from column 6 of HACCP Step 4 – Hazard Analysis Worksheet)</p>								
Critical Control Point (CCP)	Significant Hazard(s)	Limits for each Control Measure	What	Monitoring			Evaluation & Corrective Action(s) (if needed)	Supporting Documentation (if any)
				How	Frequency	Who		
<p>Task 5 Load the boat back on to the trailer</p>	Zebra mussels Eurasian milfoil Alligator weed Common reed – genus <i>Phragmites</i> Algae (golden)	Zero tolerance in the bilge, in/on lower unit(s), and on trailer.	Bilge, lower unit(s), and trailer.	Drain the lower unit(s) and bilge. Remove any visible zebra mussels and weeds.	Before leaving the ramp.	Boat operator		

HACCP Step 5 – HACCP Plan Form (continued)

<p align="center">HACCP Plan Form (all CCP's or "yes's" from column 6 of HACCP Step 4 – Hazard Analysis Worksheet)</p>								
Critical Control Point (CCP)	Significant Hazard(s)	Limits for each Control Measure	What	Monitoring			Evaluation & Corrective Action(s) (if needed)	Supporting Documentation (if any)
				How	Frequency	Who		
<p>Task 6</p> <p>Tow the boat back to the compound and/or return if borrowed from another Project Office</p>	Zebra mussels Eurasian milfoil Alligator weed Common reed – genus <i>Phragmites</i> Algae (golden)	Zero tolerance on boat and trailer.	All areas of the boat and trailer. Any part of the pickup that came into contact with the water (i.e. tires, wheels, and fenders).	Pressure wash* the boat, trailer, and pickup. Pressure wash* the anchor and rope (if used) and/or allow anchor storage area to be completely dried before using again. *Use at least 140°F water for zebra mussels.	After each use when the boat is used in infested water and is to be transported to non-infested water for use.	Boat operator		

HACCP Plan has been discussed with all employees. It is the manager's responsibility to review plan with all new employees as required.

Facility:	Address:
Signature:	Date: