

ANNUAL REPORT OF DIVE OPERATIONS

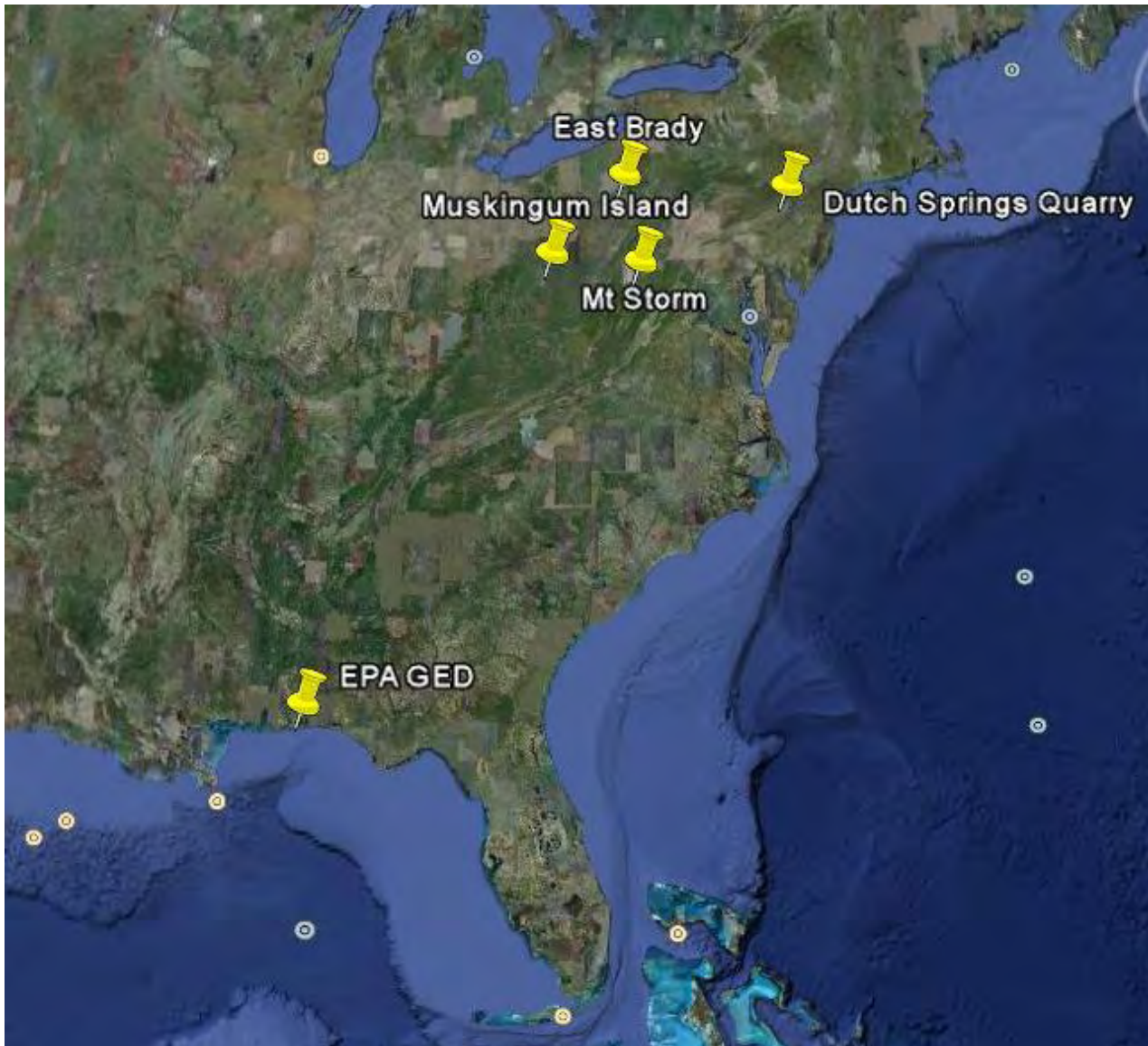
US EPA MID-ATLANTIC REGION 3

DIVE TEAM

Fiscal Year 2010 - October 2009 through September 2010

Unit Dive Officer (UDO): James N. Gouvas

Report Prepared by Alternate UDO: Steven J. Donohue



Location of EPA Region 3 Dive Operations in Fiscal Year 2010

A. DIVING ACTIVITIES

Below is a brief description of the major US EPA Mid-Atlantic Region 3 Dive Team survey and training/proficiency dive operations for Fiscal Year 2010 – the period of October 2009 through the end of September 2010. It describes the location (state and type of water body) the type of diving operation and includes any known or suspected pollutant exposures. A Summary tables with all dives completed by the team members, as well as, all dive statistics are included at the end of narrative.

R3-FY10-01. Dutch Springs Quarry – Fall Classic Proficiency and Training Dives - On December 8, 2009 four members of the Dive Team and one Trainee Diver mobilized to the Dutch Springs Quarry, near Allentown, Pennsylvania. The purpose of the exercise was for our Divers to gain proficiency and practice using wireless communication equipment in our Aga masks and in our dry suit kit. Dives were conducted in up to 70 feet of fresh water, visibility was approximately 50 feet, and the water temperature was approximately 40 degrees. There was no known or suspected pollutant exposure. Number of Dives – 6 training dives.

R3-FY10-02. Dutch Springs Quarry – Spring Training Proficiency and Training Dives - On April 28, 2010 seven members of the Dive Team mobilized to the Dutch Springs Quarry near Allentown Pennsylvania. Six Divers completed a total of 8 dives in dry suits using nitrox (approximately 36% oxygen) breathing gas. The purpose of the operation was to check out newly serviced dive regulators. The dive also served as a re-qualification dive for any diver who had not completed a dive in the last three months. Maximum depth was 79 feet of fresh water, visibility was approximately 50 feet, with the water temperature in the low 50's. There was no known or suspected pollutant exposure. Divers practiced open water ascent, diver rescue and surface swimming, and compass navigation. Number of Dives – 8 training dives.

R3-FY10-GED. EPA Diver Training Week at the Gulf Breeze Ecology Division in Florida. During the week of May 10, 2010, Jim Gouvas, UDO, Steve Donohue, Alternate UDO and John Armstead, Dive Master attended the annual training and participated and assisted with training of the working divers and dive masters. The region had one diver; Matthew Colip attending the training. Matt successfully completed the Scientific Diver Training and passed the exam to become members of the Region 3 Dive Team. All instructor and student dives were conducted in salt water. Some of the advanced operations/instructor dives were conducted in open water in the bay or ocean but most of the dives were done in the shallow water adjacent to the GED Lab. There was no known or suspected pollutant exposure. Number of dives- 22 training dives total for trainees and instructors/advanced operations.

R3-FY10-FWS-1 During the week of June 28, five divers from EPA Region 3's Dive Team and three divers from the US Fish and Wildlife Service (FWS) conducted 64 separate dives in a collaborative freshwater mussel survey in East Brady on the Allegheny River, approximately 80 miles NNE of Pittsburgh, PA. Divers in the first part surveyed and characterized recovery of the freshwater mussel population where a bridge had been demolished and dropped into the river in 2008. Mussels and gravel substrate were sampled in 30 plots along 10 transects and placed in

mesh bags floated to the surface and processed at a shoreline station. Individual animals were identified and measured and the substrate carefully searched for small mussels. In the second part, divers searched for and collected endangered Rayed Bean mussels (*Villosa fabalis*) for relocation and repopulation of this endangered species in a segment of the Cheat River in West Virginia. Over 225 small (less than 1 inch) Rayed Beans were collected for relocation. Divers contended with three-foot visibility resulting from strong thunderstorms and stormwater runoff but the relatively shallow river depth (approximately 15 feet) safely allowed divers unlimited bottom time, within limits of their air tanks. EPA Divers took about an hour of video of the survey operations. Following the survey, with multimedia contractor support from the Region 3 office, an edited five minute video was produced, complete with maps, still and voice over narrative to describe the survey. T

R3-FY10-FWS-2 During the week of August 2, three divers from EPA Region 3's Dive Team and six divers from the US Fish and Wildlife Service (FWS) conducted 70 separate dives in a collaborative freshwater mussels survey in East Brady, PA. During the survey divers first characterized the freshwater mussel population in a control area upstream of where a bridge had been demolished and dropped into the river and then removed in 2008. Mussels and gravel substrate were removed from 18 plots along 6 transects and placed in mesh bags floated to the surface and processed at a shoreline station. Individual animals were identified and measured and the substrate carefully searched for small mussels. Over one hundred threatened Rayed Beans mussels were also collected for relocation. In the second part of the survey, divers assessed the condition of the river bed and the recovery of the mussel population under the new bridge. Divers contended with two foot visibility at the start of the week that gradually improved to almost 10 feet as the week progressed. EPA Divers also took video of the condition of the eastern bridge support pier. The coffer dam sheet piling and cribbing were still present around the pier and the inside of the coffer dam had not been backfilled with gravel. Divers noted other debris including wire cable and refuse in this area. This information and video was forwarded to the Pennsylvania Department of Transportation.

A planned August 31 through September 7 Dive Survey off the OSV Bold was cancelled due to a combination of poor underwater visibility and heavy seas. A couple strong Northeasters, and Tropical Storm Danielle passing through the mid-Atlantic the week before the survey and reduced visibility at the Redbird Reef to 1.5 meters. Tropical storm Earl also passed through the survey area during the survey window time.

Summary of Mid-Atlantic Region 3 Dive Team Operations and Statistics for FY 2010:

US EPA Mid-Atlantic Region 3 Dive Team FY 2010 Report

EPA Region 3 Dive Team								
Operations in Fiscal Year 2010								
Location	Purpose	Date	Depth	Conditions	Gas	# and Names of Divers	Total # of Dives	Dive Master
Muskingum Island, WV on the Ohio River 117 miles SW of Pittsburgh, PA	US FWS Mussel Survey	Week of 10/7 and 8 2009	feet max	freshwater	air	Borsuk (10)	10	USFWS Morrison
Dutch Springs Quarry, Allentown, Pennsylvania	Fall Training/Proficiency	12/8/2009		freshwater	air	Arnstead, Gouvas, Newman, Orenshaw, Trainee Colip (2)	6	Gouvas
Dutch Springs Quarry, Allentown, Pennsylvania	Spring Training/Proficiency	4/28/2010		freshwater	nitrox	Byro, Chase, Donohue (2), White (2), Newman, Orenshaw,	8	Gouvas
Gulf Breeze, Florida	EPA Diver Training	Week of 5/10/10	ranging from 11 feet to	saltwater	air and nitrox	Colip (10), Donohue (5), Arnstead (4), Gouvas (3)	22	various
Allegheny River, Brady Bend	Mussels Survey and Mussel Harvesting	6/28/2010	16	freshwater	air	Borsuk (12), Chase (12), Donohue (8), Gouvas (7), White (9),	48	USFWS Morrison
Allegheny River, Brady Bend	Mussels Survey and Mussel Harvesting	8/2/2010	16	freshwater	air	Borsuk (9), Donohue (8), Gouvas (2),	19	USFWS Morrison
North Atlantic Ocean, 16 NM Off Rehobeth Delaware	Delaware Redbird Artificial Reef Survey	CANCELLED Scheduled for August 31 through September 7						
Delaware Bay - Artificial Reef and Hard Bottom	Assess benthic community, embeddedness, and habitat	CANCELLED Scheduled for August 31 through September 7						
							113	

**Breakdown of Mid-Atlantic Region 3 Dive Team
Survey and Training/Proficiency Dives for FY 2010:**

Total	EPA Survey or Work Dives	EPA Training and Proficiency Dives*	Personal Proficiency Dives**
176	77	36	63

Note: * Dives done on government time and expense.

** Dives done on personal time and expense.

Personal dive data is tracked for proficiency and is available upon request

B. DIVING ACCIDENTS, INJURIES, OR INCIDENTS

Describe all accidents, injuries, and incidents: There were no diving or related non-diving accidents, injuries or incidents experienced by our divers in FY 2010.

C. DIVE TRAINING

1. Describe the type of training conducted/received, and list the name, office, and level of certification for each trainee: See the Narrative in Section A and the Summary Tables above. See the Table in Section E below for a complete list of the names, offices, and certification level of each member of the EPA Region 3 Dive Team.

The Mid-Atlantic Region 3 Dive Team added one new member in Fiscal Year 2010. Matthew Colip is a Biologist with our Water Protection Division in the Regional Office in Philadelphia. Matt successfully completed the Gulf Ecology Division EPA Diver Training Course and was certified as a Scientific Divers. Seven Members of the Dive Team and two Trainees completed CPR/AED and first aid training in 2010. Five members of the Dive Team completed a Boat Operator and Trailer Towing Certification class developed and presented by EPA Region 3 Certified Merchant Mariners and the Safety Health and Environmental Manager.

2. List any training needed. Our divers will need to complete the annual 8 hour refresher for their 40 hour HAZWOPER training or 8 hour field safety training in FY 2011. Matt Colip, the only current Dive Team member not trained as a Hazardous Site Worker, is schedule to take the 40 Hour HAZWOPER Training early in FY 2011. At least some of our divers have received formal training as Rescue Diverss. It would enhance safety to have more of our team formally trained as rescue divers either by attending a commercial class or bringing an instructor in for this training. Time and budget permitting we would like to have professional training in underwater photography and videography. The EPA Dive Team is exploring volunteering at the Camden, NJ Aquarium.



East Brady, Pennsylvania Freshwater Mussel Survey June 2010

D. DIVE EQUIPMENT

1. Same as last year? Yes X No
2. If no, list and note the equipment that is new or removed from service.

E. REVIEW OF UNIT DIVING PERSONNEL

Name	Current Certification	Position	Division	Age	Sex
John A. Armstead	Dive Master	Env. Scientist	WPD	55	M
Frank A. Borsuk	Scientific	Biologist	EAID	44	M
David Byro	Dive Master	Env. Scientist	EAID	54	M
Kelley Chase	Scientific	Env. Scientist	HSCD	43	F
Matthew Colip	Scientific	Biologist	WPD	27	M
Steven J. Donohue **	Dive Master	Env. Scientist	EAID	52	M
James N. Gouvas *	Dive Master	Chief Scientist	EAID	61	M
Eric Newman	Dive Master	Env. Engineer	HSCD	47	M
Dennis Orenshaw	Dive Master	Env. Scientist	HSCD	58	M
Brad White	Scientific	Env. Scientist	HSCD	36	M
Notes:					
* Unit Dive Officer, ** Alternate UDO					
UDO and Alternate have Master and OUPV Captain's License, respectively					
All Divers have 40 Hour HAZWOPER & 8 Hour Annual Refresher					
Byro, Chase and White are EPA R3 Certified Small Boat Operators					
EAID - Environmental Assessment and Innovation Division					
HSCD - Hazardous Sites Cleanup Division					
WPD - Water Protection Division					



East Brady, Pennsylvania Freshwater Mussel Survey August 2010

F. TIME SPENT ON THE NATIONAL PROGRAM

1. Time expenditures.

<u>ACTIVITY</u> (DESCRIPTION)	<u>TIME</u> (Hrs/Days)
Assistance with Diver Training Course	__10 days
Review of Documents (Revised DSM, emails)	__2 days
Performing Action Items (e.g., Prep for & Audit of Dive Opts)	__0 day
Preparation for and Attendance at Meetings (Annual DSB Meeting)	_10day _
Technical Assistance to Other Units	_0 days_-
Other	__

2. Fiscal(monetary) expenditures:

COST OF TRAVEL SPENT ON NATIONAL PROGRAM

(list by trip)

Attend Pensacola training	\$ 3000
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