

Deployment 5 Summary

Period: October 14 to December 1, 2013

Regulatory Requirements

Condition 40A of the NYSDEC Permit ID 3-9903-00043/00012 requires that the Project install stationary receivers capable of detecting sonic tags in the vicinity of any Authorized Activities. Data downloads shall occur every 60 days at minimum. "Following each data download, a report shall be submitted with data files, and a summary of fish present and/or moving through the construction zone."

The Endangered Species Act Section 7 Consultation Biological Opinion dated April 10, 2013, Term and Condition #10 to implement Reasonable and Prudent Measure #4, requires that "Information collected from any stationary receivers must be downloaded at least every 60 days. Preliminary reports containing information on the number of tagged sturgeon detected must be provided to NMFS on a regular basis, but no less frequently than every 60 days. If reports cannot be provided on that frequency, FHWA must provide an explanation to NMFS within the 60 day period and provide the report as soon as possible."

The following is the summary of detections between October 14, 2013 and December 1, 2013. As discussed with NMFS and NYSDEC, the formal submittal of this information was delayed until permissions and tag information were obtained.



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Equipment and Location

	Deployment Location		Deployment Date and Time		Equipment Information			
Station	Latitude	Longitude	Date	Time	Vemco Receiver	Sync Tag*	Temp Tag	Lotek Receiver
St01	41.07451	-73.91024	14-Oct-13	09:47:12am	122371	65006		
St02	41.07492	-73.89892	14-Oct-13	10:08:29am	122372	65011		
St03	41.06608	-73.91072	14-Oct-13	11:18:44am	122373	65008		
St04	41.06620	-73.89933	14-Oct-13	10:28:01am	122888	65010		
St05**	41.07371	-73.89345	7-Aug-13	07:45:36am	122891	65002		
St06	41.07454	-73.88843	16-Oct-13	12:55:08pm	122892	65014		265126
St07	41.07854	-73.87450	16-Oct-13	12:31:45pm	122887	65012		265127
St08	41.07283	-73.87310	14-Oct-13	01:40:00pm	122890	65013		
St09	41.06921	-73.89196	14-Oct-13	12:13:11pm	122893	65001		
St10**	41.06469	-73.89198	18-Sep-13	09:38:32am	122894	65003		265121
St11	41.06669	-73.87352	16-Oct-13	12:24:51pm	122889	65015		265119
St12	41.07631	-73.88451	15-Oct-13	03:00:28pm	122884	65016		
St13	41.07597	-73.88075	15-Oct-13	02:50:19pm	122885	65017		
St14	41.07325	-73.88546	15-Oct-13	01:11:28pm	122886	65019	13339	
St15	41.07318	-73.88217	15-Oct-13	12:46:05pm	122883	65018		
St16	41.07239	-73.87858	14-Oct-13	04:02:17pm	122879	65020		
St17	41.06898	-73.88761	15-Oct-13	09:37:26am	122881	65021		
St18	41.06892	-73.88330	15-Oct-13	10:05:20am	122880	65022		
St19	41.06870	-73.87787	15-Oct-13	11:30:39am	122876	65023		
St20**	41.06649	-73.88065	10-Aug-13	04:45:18am	122882	65005	13338	
St21	41.06602	-73.88503	15-Oct-13	12:23:35pm	122877	65004		
St22	41.06566	-73.87691	15-Oct-13	11:58:05am	122878	65007		
St23	41.07363	-73.91348	14-Oct-13	01:16:54pm	122871	65024		
St24	41.07321	-73.90438	14-Oct-13	12:35:23pm	122872	65027		
St25	41.06856	-73.90527	14-Oct-13	10:47:53am	122875	65026		
St26	41.06829	-73.89596	14-Oct-13	11:55:14am	122873	65025		
St27	41.07572	-73.91236	14-Oct-13	03:06:46pm	123565	26747		
St28	41.07065	-73.91371	14-Oct-13	02:10:39pm	123568	26743		
St29	41.07026	-73.90930	14-Oct-13	02:20:39pm	123566	26746		
St30	41.07033	-73.91382	14-Oct-13	02:03:21pm	123567	26741		
St31	41.06994	-73.90966	14-Oct-13	01:50:17pm	123569	26739		
St32	41.07574	-73.89342	14-Oct-13	02:52:00pm	123570	26745		
Vemco Test Tag = A69-1601-28098; Lotek Test Tag = 1								

^{*}The prefix for all sync tag codes is "A69-1601-" and the prefix for temperature tags is "A69-9002-" **Stations 5,10, and 20 were not able to be recovered with grappling gear during this download effort



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Numbers of Fish Detected by Species

Species	Number Detected		
Atlantic sturgeon			
Shortnose sturgeon	9		
American shad			
Blueback herring			
Species unknown	21		
Total			

Summary does not include Tag IDs with fewer than three detections. Fish tagged with Lotek dual-mode tags that were detected on both Vemco and Lotek receivers are counted once.

False detections (i.e. detections of transmitter codes that aren't actually present) are inherent in all telemetry systems. Vemco outlines a methodology to filter the data further for Tag IDs that may not be legitimate fish detections (VEMCO Application Note DOC-004691 2012). This methodology involves filtering based on intervals between successive detections, the programmed average transmission rate of the tags, and anticipated maximum residency.

At present, all of the information is not available to accurately conduct this analysis. However, Tag IDs with only a single detection are very likely false detections. Additionally, some Tag IDs with multiple detections can also be false detections. While VEMCO is currently developing software to conduct this filtering for false detections, all data will be further analyzed in the quarterly reports for Tag IDs that have multiple detections but may not be legitimate fish detections.



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Atlantic sturgeon

Vemco Tag ID	Lotek Tag ID
A69-1303-10471	10472
A69-1303-10472	10476
A69-1303-10476	

^{*} Shaded Tag IDs were false detections.



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Shortnose sturgeon

Vemco Tag ID	Lotek Tag ID
A69-1303-10467	10467
A69-1303-10473	10473
A69-1303-10475	10475
A69-1303-10774	10774
A69-1303-10787	10787
A69-1303-10795	10795
A69-1303-10802	10802
A69-1303-10807	10810
A69-1303-10810	

^{*} Shaded Tag IDs were false detections.



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Unknown species

Vemco Tag ID	Vemco Tag ID	Vemco Tag ID
A69-1303-10814		
A69-1303-10815		
A69-1303-10817		

^{*} Shaded Tag IDs were false detections.