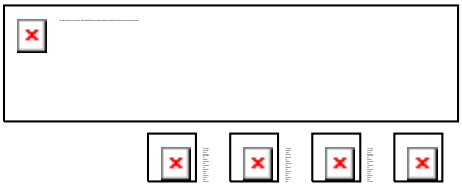
EndangeredSpecies Resource

From: Cary, Richard H. <Richard.Cary@pseg.com>
Sent: Thursday, April 15, 2021 3:52 PM
To: incidental.take@noaa.gov; EndangeredSpecies Resource
Cc: Neilan, Brian
Subject: [External_Sender] Salem Generating Station - Incidental Take Reports: Atlantic Sturgeon 04/15/2021
Attachments: Sturgeon Incidental Take Report for 04152021 #1.pdf; Sturgeon Incidental Take Report for 04152021 #2.pdf

Attached are the Incidental Take Reports and Data Collection Forms for one live and one deceased Atlantic sturgeon collected on 04/15/2021 from the Salem Generating Station during routine raking of the cooling water intake trash bars. The live sturgeon was returned to the Delaware River following examination and the deceased specimen is being held for study pending direction from NOAA/NMFS. This incidental take is authorized under Biological Opinion NER-2010-6581.

Thanks, and please let me know if you have any questions or need additional information.

Richard Cary
Environmental Compliance & Program Manager
PSEG Nuclear Environmental Affairs
O: 856-339-1487
C: 706-254-2584



Appendix C, Part 2A (Sturgeon)

Photographs should be taken and the following information should be collected from all sturgeon (alive and dead). Please submit all necropsy results (including sex and stomach contents) to NMFS upon receipt. You must also complete and submit the "Sturgeon Data Collection Form"

Observer's full name: Brian Murphy (Environmental Consulting Services, Inc. [ECSI])
Reporter's full name: Brian Murphy

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; SGS Unit 1, intake 13B

Date animal observed: 04/15/2021 Time animal observed: 08:30 AM
Date animal collected: 04/15/2021 Time animal collected: 08:22 AM

Environmental conditions at time of observation (i.e., tidal stage, weather):
Air temp. – 15.5 °C; Sal. – 3.0 ppt; Wind –SE; sky – overcast; Wave – slight; tide- ES (88.5 ft)

If removed from intakes (trash racks or traveling screens):
Date and time of last inspection of screen: 04/15/2021; at 12:54 AM
Water temperature (°C) at site and time of observation: 14.0 °C
Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 6 circulators
Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 99.4% /Unit 2: 99.9%
Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.4% /Unit 2: 99.2%

STURGEON DATA COLLECTION FORM

For use in documenting sturgeon injury or mortality incidental to a federal action

OBSERVER'S CONTACT INFORMATION
Name: First **Brian** Last **Murphy**
Agency Affiliation **PSEG subcontractor** Email **Brian.Murphy@pseg.com**
Address **100 South Cass Street, Middletown, DE 19709**
Area code/Phone number **(302) 378-9881** **(Environmental Consulting Services, Inc.)**

SEC 7 UNIQUE IDENTIFIER (PCTS No.Assigned by NMFS)

DATE REPORTED:
Month 04 Day 15 Year 2021
DATE EXAMINED:
Month 04 Day 15 Year 2021

SPECIES: (check one)
- ☐ shortnose sturgeon
- ☒ Atlantic sturgeon
- ☐ Unidentified *Acipenser* species

Check "Unidentified" if uncertain. **See reverse side of this form for aid in identification.**

LOCATION FOUND: ☐ Offshore (Atlantic or Gulf beach) ☒ Inshore (bay, river, sound, inlet, etc)
River/Body of Water **Delaware River** City **Lower Alloways Creek** State **NJ**
Descriptive location (be specific) **Removed from Circulating Water Intake Structure (CWIS) trash racks, intake bay 13B during routine trash rack cleaning at the Salem Generating Station, PSEG Nuclear LLC.**
Latitude **39.460603°** (Dec. Degrees) Longitude **-75.536133°** (Dec. Degrees)

CARCASS CONDITION at time examined: (check one)
- ☒ 1 = Fresh dead
- ☐ 2 = Moderately decomposed
- ☐ 3 = Severely decomposed
- ☐ 4 = Dried carcass
- ☐ 5 = Skeletal, scutes & cartilage

SEX:
- ☒ Undetermined
- ☐ Female ☐ Male

How was sex determined?
- ☐ Necropsy
- ☐ Eggs/milt present when pressed
- ☐ Borescope

MEASUREMENTS: Circle unit

Fork length	**76.2 cm**
Total length	**81.2 cm**
Length ☒ actual ☐ estimate	
Mouth width (inside lips, see reverse side)	**5.1 cm**
Interorbital width (see reverse side)	**7.6 cm**
Weight ☒ actual ☐ estimate	**3.5 kg**

TAGS PRESENT? Examined for external tags including fin clips? ☒ Yes ☐ No Scanned for PIT tags? ☒ Yes ☐ No

Tag #	Tag Type	Location of tag on carcass
933000320184018	**PIT**	**base of dorsal fin left side of torso**

CARCASS DISPOSITION: (check one or more)
- ☐ 1 = Left where found
- ☐ 2 = Buried
- ☐ 3 = Collected for necropsy/salvage
- ☒ 4 = Frozen for later examination
- ☐ 5 = Other (describe).

Carcass Necropsied?
☐ Yes ☒ No
Date Necropsied: _____
Necropsy Lead: _____

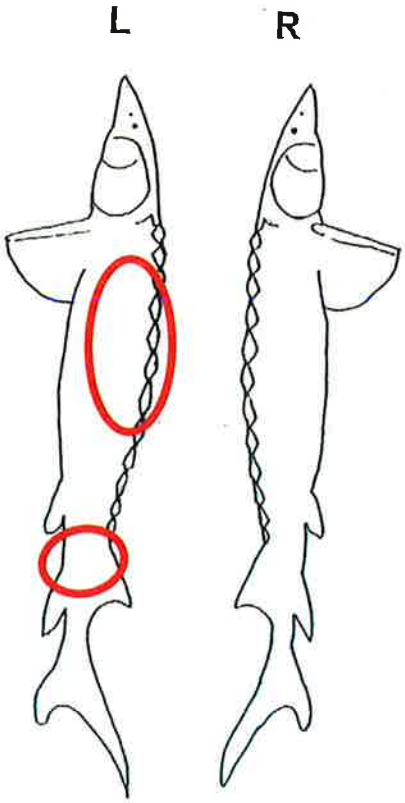
PHOTODOCUMENTATION:
Photos/vide taken? ☒ Yes ☐ No
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? ☒ Yes ☐ No

Sample	How preserved	Disposition (person, affiliation, use)
Pelvic fin clip	**stored in non-denatured ethanol and refrigerated.**	**Held at the office of ECSI for aggregated shipment to designated laboratory.**

Comments: A deceased Atlantic sturgeon was retrieved from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/15/21, at 08:22AM. After positive identification was made by Environmental Consulting Services personnel, the specimen was measured, photographed, and inspected for tags. No evidence of external tags was found, however an existing PIT tag was indicated, identified as #933000320184018. This same specimen was collected two days prior (4/13/2021) during trash racking. During processing on that date, specimen was identified with the current PIT, and a pelvic fin clip sample was collected, which is being stored in refrigeration for aggregated shipment to a designated laboratory. The deceased specimen was placed on ice and prepared for transport back to the ECSI main office, where it will be stored under refrigeration, awaiting direction on further disposition.

Draw wounds, abnormalities, tag locations on diagram and briefly describe below



Location of two to three lacerations to the dorsal surface

Location PIT placement

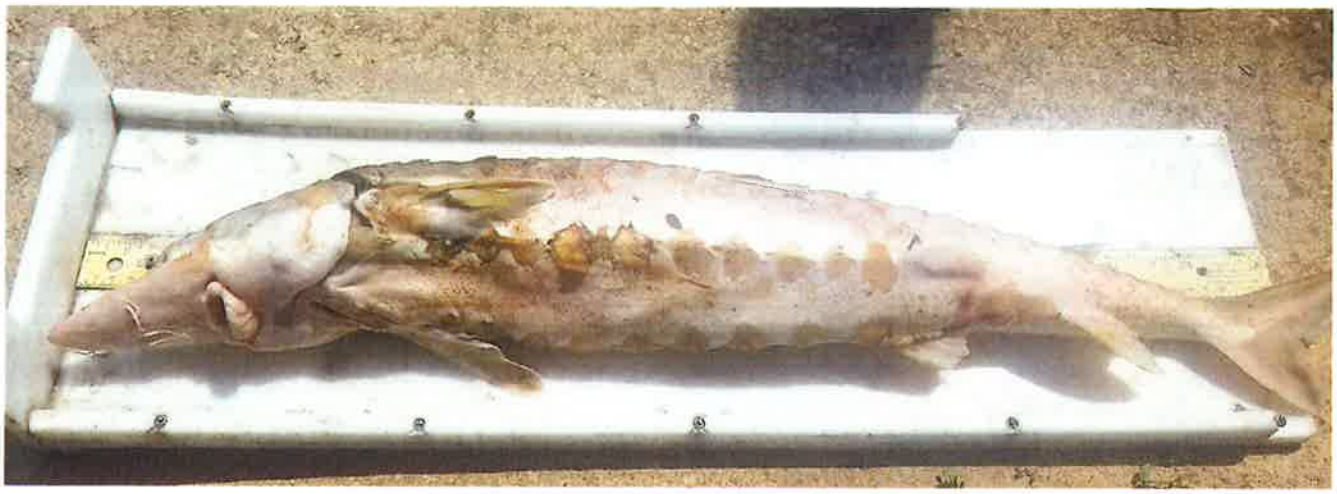
Describe any wounds / abnormalities (note tar or oil, gear or debris entanglement, propeller damage, etc.). **Please note if no wounds / abnormalities are found. Specimen was deceased at the time of this collection. A check for tags revealed the exitance of a PIT, identified as #933000320184018. The same specimen, collected alive but showing moderate damage two days prior, had been released after tagging and processing. Comparison of photographs from both collection events revealed the same three lacerations on the dorsal surface, further verifying the specimen as being a recapture (refer to illustration).**

Submit completed forms (within 24 hours of observation of fish): by e-mail to Incidental Take@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

Data Access Policy: Upon written request, information submitted to National Marine Fisheries Service (NOAA Fisheries) on this form will be released to the requestor provided that the requestor credit the collector of the information and NOAA Fisheries. NOAA Fisheries will notify the collector that these data have been requested and the intent of their use.

Photographs

A dorsolateral view showing the size and condition of a deceased, Atlantic sturgeon (Acipenser oxyrinchus), retrieved at approximately 08:22 on 04/15/2021 from the Salem Circulating Water Intake trash collection basket by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/15/2021).



A ventral view of the specimen. At the time of processing, a PIT was indicated, identified as tag #933000320184018. Based on the tag number, the same specimen was collected during a prior incidental take event on 4/13/2021. The specimen was alive on that date, but exhibited some minor damage in the form of two or three lacerations along the dorsal surface, with the largest laceration extending down to the lateral line of scutes. Comparison of photos from that event with this specimen, in addition to the existing PIT, verify the individual as being a recapture (04/15/2021).

Photographs

A dorsal view showing the location of a deep laceration to the dorsal surface, which extends down to the lateral line of scutes on the left side of the torso. The damage observed is consistent with the damage recorded in photos of the live sturgeon collected two days prior (04/15/2021).

Appendix C, Part 2A (Sturgeon)

Photographs should be taken and the following information should be collected from all sturgeon (alive and dead). Please submit all necropsy results (including sex and stomach contents) to NMFS upon receipt. You must also complete and submit the "Sturgeon Data Collection Form"

Observer's full name: Brian Murphy (Environmental Consulting Services, Inc. [ECSI])
Reporter's full name: Brian Murphy

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; SGS Unit 1, intake 13A

Date animal observed: 04/15/2021 Time animal observed: 08:55 AM
Date animal collected: 04/15/2021 Time animal collected: 08:53 AM

Environmental conditions at time of observation (i.e., tidal stage, weather):
Air temp. – 15.5 °C; Sal. – 3.0 ppt; Wind –SE; sky – partly cloudy; Wave – slight; tide- F1 (89.0 ft)

If removed from intakes (trash racks or traveling screens):
Date and time of last inspection of screen: 04/15/2021; at 12:54 AM
Water temperature (°C) at site and time of observation: 14.0 °C
Number of pumps operating at time of observation: Unit 1: 6 circulators / Unit 2: 6 circulators
Average percent of power generating capacity achieved per unit at time of observation: Unit 1: 99.4% /Unit 2: 99.9%
Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 99.4% /Unit 2: 99.2%

PIT ID

STURGEON DATA COLLECTION FORM

For use in documenting sturgeon injury or mortality incidental to a federal action

OBSERVER'S CONTACT INFORMATION
Name: First **Brian** Last **Murphy**
Agency Affiliation **PSEG subcontractor** Email **Brian.Murphy@pseg.com**
Address **100 South Cass Street, Middletown, DE 19709**
Area code/Phone number **(302) 378-9881** (Environmental Consulting Services, Inc.)

SEC 7 UNIQUE IDENTIFIER (PCTS No. Assigned by NMFS)

DATE REPORTED:
Month 04 Day 15 Year 2021
DATE EXAMINED:
Month 04 Day 15 Year 2021

SPECIES: (check one)
- ☐ shortnose sturgeon
- ☒ Atlantic sturgeon
- ☐ Unidentified *Acipenser* species

Check "Unidentified" if uncertain. **See reverse side of this form for aid in identification.**

LOCATION FOUND: ☐ Offshore (Atlantic or Gulf beach) ☒ Inshore (bay, river, sound, inlet, etc)
River/Body of Water **Delaware River** City **Lower Alloways Creek** State **NJ**
Descriptive location (be specific) **Removed from Circulating Water Intake Structure (CWIS) trash racks, intake bay 13A, during routine trash rack cleaning at the Salem Generating Station, PSEG Nuclear LLC.**
Latitude **39.460603°** (Dec. Degrees) Longitude **-75.536133°** (Dec. Degrees)

CARCASS CONDITION at time examined: (check one)
- ☐ 1 = Fresh dead
- ☐ 2 = Moderately decomposed
- ☐ 3 = Severely decomposed
- ☐ 4 = Dried carcass
- ☐ 5 = Skeletal, scutes & cartilage

SEX:
- ☒ Undetermined
- ☐ Female ☐ Male

How was sex determined?
- ☐ Necropsy
- ☐ Eggs/milt present when pressed
- ☐ Borescope

MEASUREMENTS: Circle unit

Fork length	**68.5 cm**
Total length	**78.7 cm**
Length ☒ actual ☐ estimate	
Mouth width (inside lips, see reverse side)	**3.8 cm**
Interorbital width (see reverse side)	**5.7 cm**
Weight ☒ actual ☐ estimate	**3.5 kg**

TAGS PRESENT? Examined for external tags including fin clips? ☒ Yes ☐ No Scanned for PIT tags? ☒ Yes ☐ No

Tag #	Tag Type	Location of tag on carcass
No tag found		

CARCASS DISPOSITION: (check one or more)
- ☐ 1 = Left where found
- ☐ 2 = Buried
- ☐ 3 = Collected for necropsy/salvage
- ☐ 4 = Frozen for later examination
- ☒ 5 = Other (describe). Specimen was alive, but exhibited some minor bruising. After processing, and a period of holding to reduce stress, it was released back to the Delaware River.

Carcass Necropsied?
☐ Yes ☒ No

Date Necropsied: _____

Necropsy Lead: _____

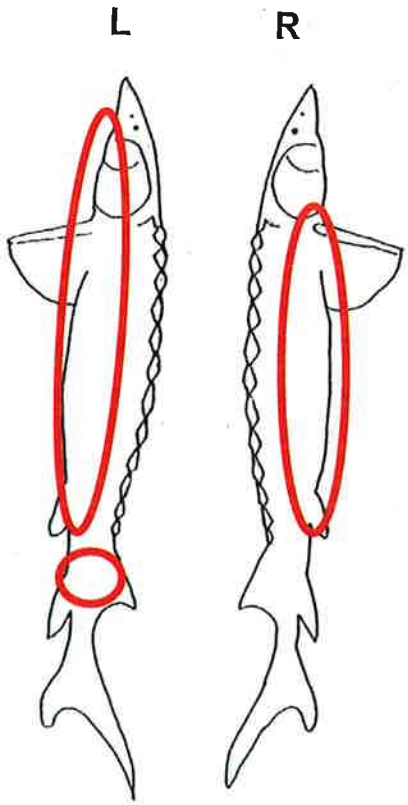
PHOTODOCUMENTATION:
Photos/vide taken? ☒ Yes ☐ No
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? ☒ Yes ☐ No

Sample	How preserved	Disposition (person, affiliation, use)
Pelvic fin clip	stored in non-denatured ethanol and refrigerated.	Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A second, Atlantic sturgeon was retrieved alive from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/15/21, at 08:53AM. After positive identification was made by Environmental Consulting Services personnel, the specimen was measured, photographed, and inspected for tags. No evidence of external tags was found, and no existing PIT tags were indicated. Therefore, PIT tagging procedures for placement of a tag were implemented. Specimen has been identified with tag #933000320184017. A pelvic fin clip was also collected for future DNA analysis. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory. Upon completion of processing, the specimen was released back to the Delaware River at 09:04AM.

Draw wounds, abnormalities, tag locations on diagram and briefly describe below



Location of minor bruising on both left and right sides and on left side of rostrum

Location of implanted PIT

Describe any wounds / abnormalities (note tar or oil, gear or debris entanglement, propeller damage, etc.). **Please note if no wounds / abnormalities are found. Specimen was alive at the time of collection, but exhibited some minor damage in the form of bruising along the lateral line of scutes on both the left and right side, as well as long the left side of the rostrum. No PIT was indicated, so tagging procedures were implemented. Specimen received a PIT (#933000320184017), implanted below the dorsal fin on the left side (refer to diagram above).**

Submit completed forms (within 24 hours of observation of fish): by e-mail to Incidental Take@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

Photograph

A dorsolateral view showing the size and condition of a second, Atlantic sturgeon (Acipenser oxyrinchus), retrieved alive at approximately 08:53AM on 04/15/2021 from the Salem Circulating Water Intake trash collection basket by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/15/2021).