

From: Strait, Kenneth A. <Kenneth.Strait@pseg.com>
Sent: Friday, April 3, 2020 8:36 PM
To: incidental.take@noaa.gov; EndangeredSpecies Resource
Cc: jeanette.bowers@dep.nj.gov
Subject: [External_Sender] SALEM GENERATING STATION-INCIDENTAL TAKE OF ATLANTIC STURGEON
Attachments: Sturgeon incidental take reports for 04022020.pdf

Attached are the Incidental Take Reports and Data Collection Forms for the Atlantic sturgeon collected on 04/02/2020 at the Salem Generating Station cooling water intake. This incidental take is authorized under Biological Opinion NER-2010-6581.

Please let me know if you have any questions or need additional information. Thanks.

Ken

Kenneth A. Strait

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Mail Envelope Properties (9ed2a8751a504c1c82377c695f6f387f)

Subject: [External_Sender] SALEM GENERATING STATION-INCIDENTAL TAKE OF ATLANTIC STURGEON
Sent Date: 4/3/2020 8:36:21 PM
Received Date: 4/3/2020 8:37:31 PM
From: Strait, Kenneth A.

Created By: Kenneth.Strait@pseg.com

Recipients:

"jeanette.bowers@dep.nj.gov" <jeanette.bowers@dep.nj.gov>

Tracking Status: None

"incidental.take@noaa.gov" <incidental.take@noaa.gov>

Tracking Status: None

"EndangeredSpecies Resource" <EndangeredSpecies.Resource@nrc.gov>

Tracking Status: None

Post Office: pseg.com

Files	Size	Date & Time
MESSAGE	1349	4/3/2020 8:37:31 PM
Sturgeon incidental take reports for 04022020.pdf		6705411

Options

Priority: Normal

Return Notification: Yes

Reply Requested: No

Sensitivity: Normal

Expiration Date:

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 12:50 pm

Date animal collected: 04/2/2020 Time animal collected: 13:00 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 12.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb Slk(88.0ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.0 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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	70.0cm
Total length	81.0cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	4.4 cm
Interorbital width (see reverse side)	6.6 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	2.6 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 healthy and in excellent condition. 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:

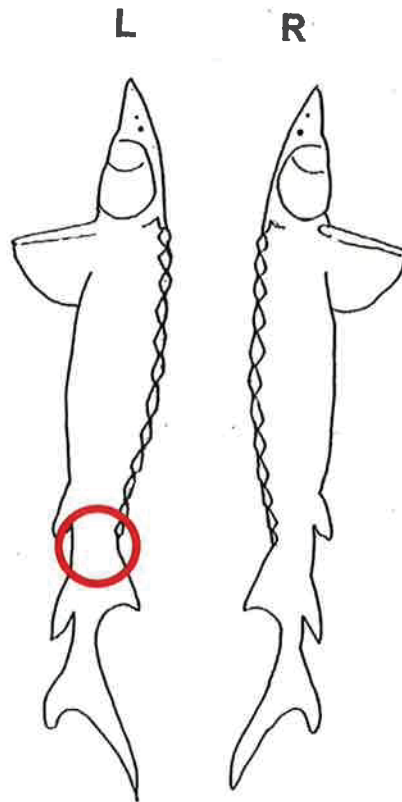
Photos/video taken? Yes No
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 12:50. 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 #933000220017830. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage. A PIT was identified, located 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 IncidentalTake@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

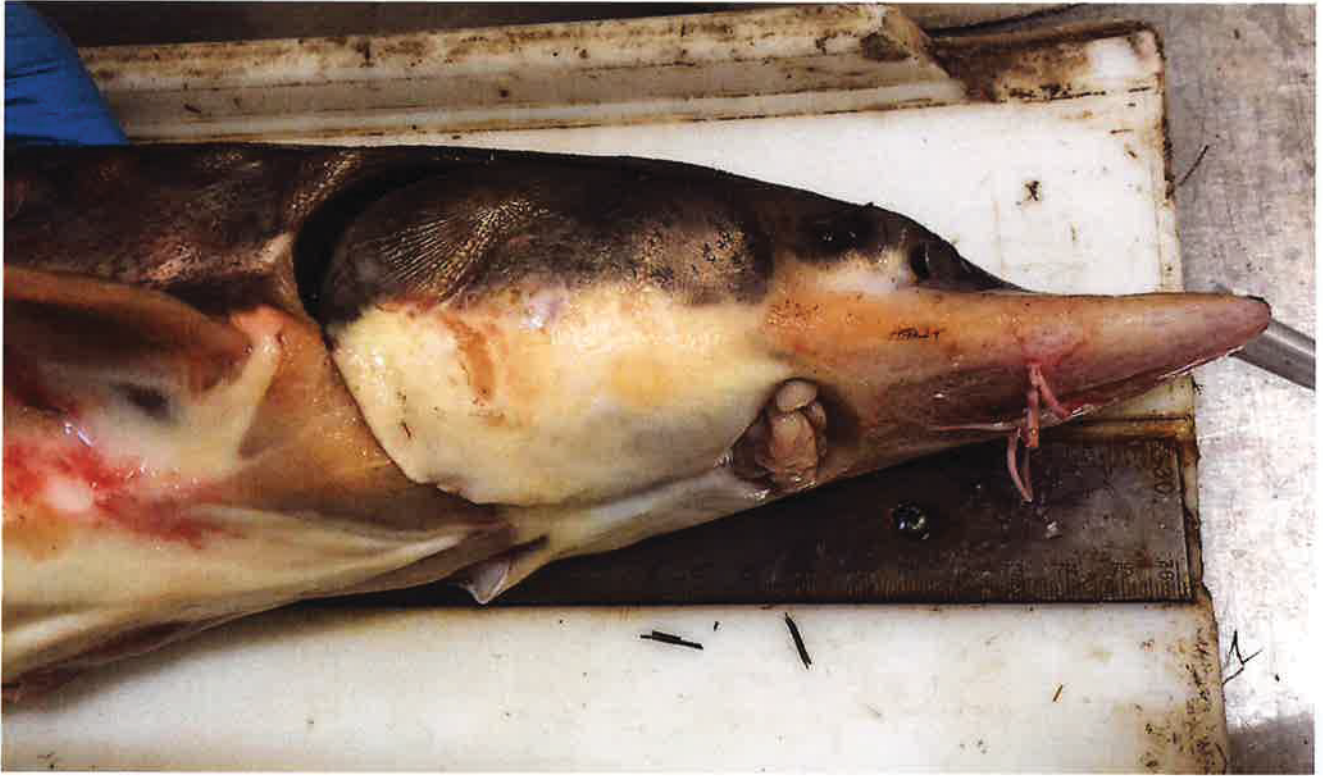


A dorsolateral view showing the size and condition of the live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 12:50am on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen. No obvious wounds were observed (04/2/2020).

Photographs



Dorsal view of the head, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 13:15 pm

Date animal collected: 04/2/2020 Time animal collected: 13:40 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 12.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb Slk(88.0ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.0 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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 **73.0cm**
Total length **82.6cm**
Length actual estimate
Mouth width (inside lips, see reverse side) **4.4 cm**
Interorbital width (see reverse side) **6.1 cm**
Weight actual estimate **3.1kg**

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 healthy and in excellent condition. 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/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

Pelvic fin clip

How preserved

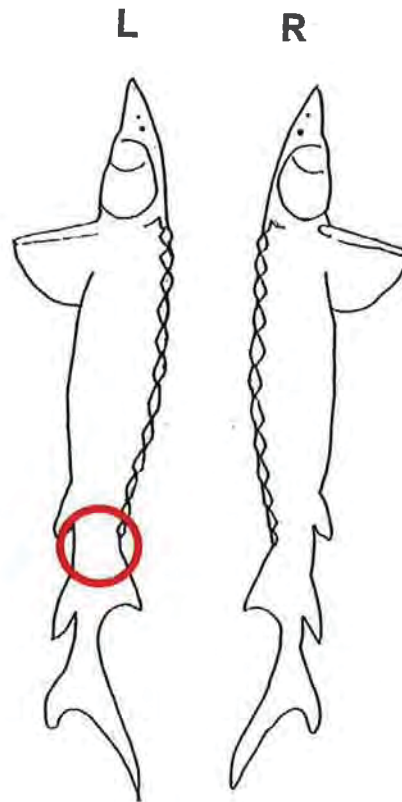
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A second live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 13:40. 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 #933000220017825. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 13:45. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage, except for a minor laceration on the left pelvic fin and some minor bruising on the right side of the torso. A PIT was identified, located 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 IncidentalTake@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

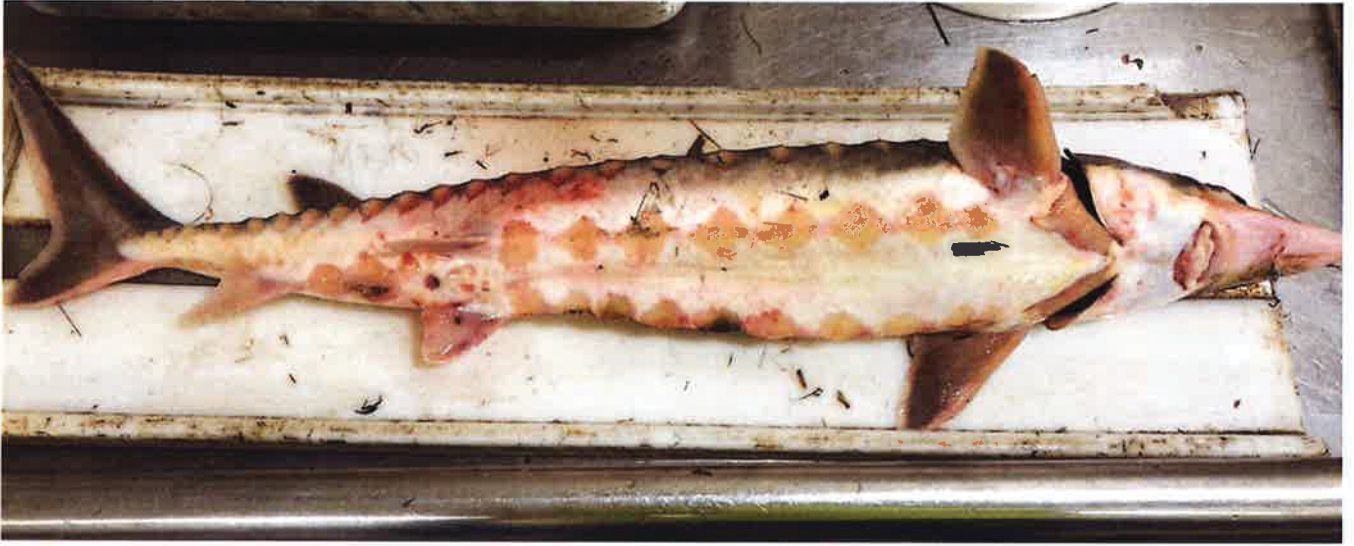


A dorsolateral view showing the size and condition of a second, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 13:40pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A dorsal view of the specimen. No obvious wounds, except for a minor laceration on the left pelvic fin and some bruising on the right side of the torso, were observed (04/2/2020).

Photographs



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 13:30 pm

Date animal collected: 04/2/2020 Time animal collected: 13:47 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 12.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb Slk(88.0ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.0 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	73.6cm
Total length	82.5cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	4.6 cm
Interorbital width (see reverse side)	7.0 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	3.6kg

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 healthy and in good condition. 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:

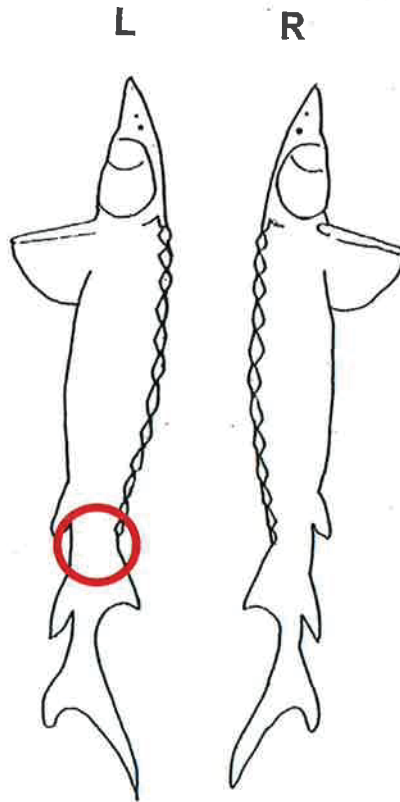
Photos/vids taken? Yes No
 Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 third, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 13:47. 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 #933000220017828. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 13:51. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



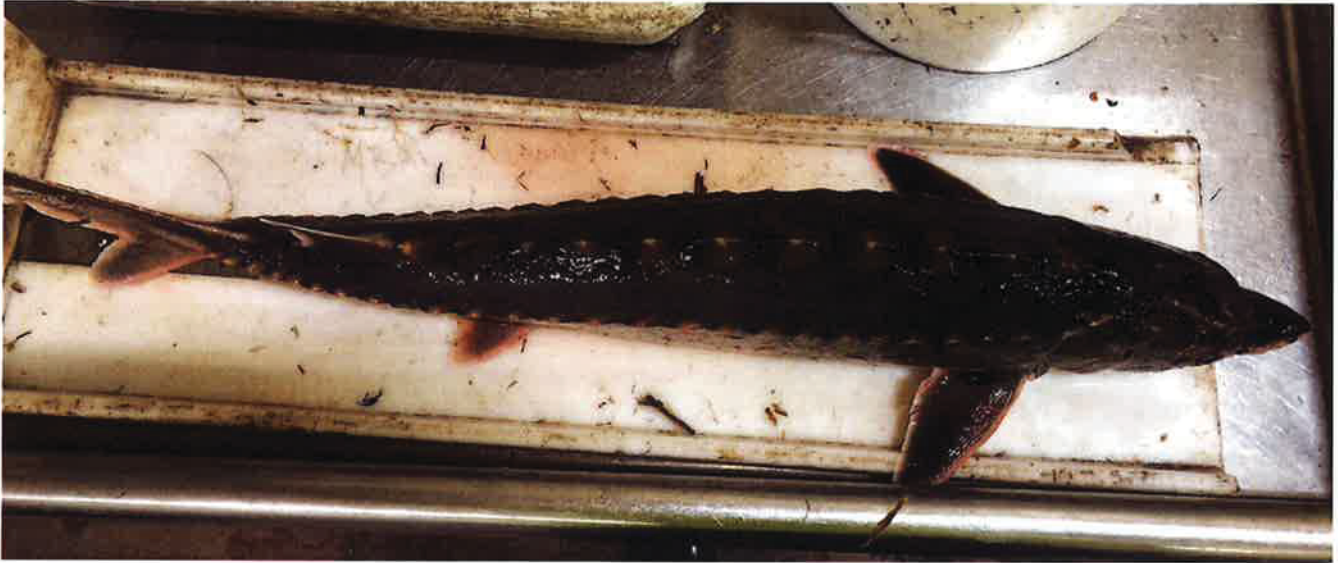
PIT tag identified just below dorsal fin

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 live at the time of collection, and had no serious signs of damage. PIT was implanted, located 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](mailto:IncidentalTake@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 dorsal view showing the size and condition of a third, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 13:47pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A dorsolateral view of the specimen. No obvious wounds, except for minor bruising on the left side of the torso, was observed (04/2/2020).

Photographs



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 13:30 pm

Date animal collected: 04/2/2020 Time animal collected: 13:53 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb Slk(88.0ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.0 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	57.1 cm
Total length	65.3 cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	3.8 cm
Interorbital width (see reverse side)	5.6 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	1.4 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 healthy and in good condition. 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:

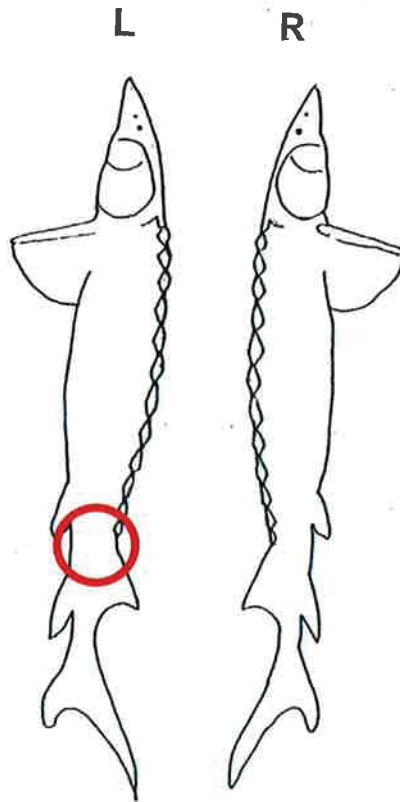
Photos/video taken? Yes No
 Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 fourth, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 13:53. 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 #933000220017819. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 13:59. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no serious signs of damage. PIT was implanted, located 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 IncidentalTake@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 fourth, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 13:53pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth. Specimen had some minor bruising on the ventral portion of the torso (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 13:45 pm

Date animal collected: 04/2/2020 Time animal collected: 14:00 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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 **58.0 cm**
Total length **67.0 cm**
Length actual estimate
Mouth width (inside lips, see reverse side) **3.0 cm**
Interorbital width (see reverse side) **5.3 cm**
Weight actual estimate **1.3 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 healthy and in excellent condition. 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/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

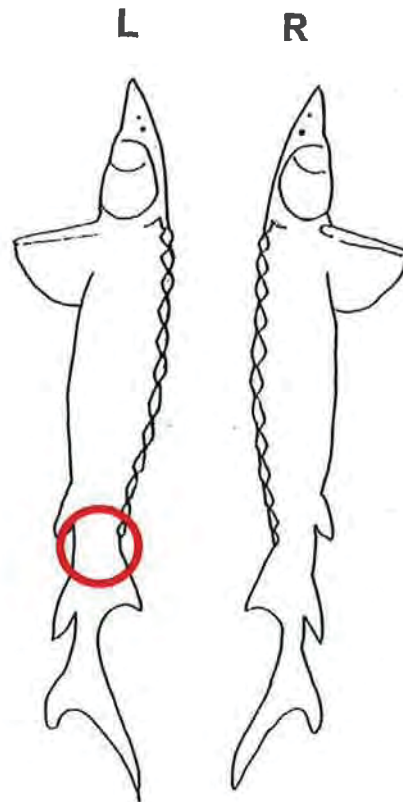
Pelvic fin clip

How preserved
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)
Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A fifth, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:00 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 #933000220017817. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 14:06. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no serious signs of damage. PIT was implanted, located 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 IncidentalTake@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 dorsal view, showing the size and condition of a fifth, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:00pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth. Specimen appeared to be in very good condition (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 13:55 pm

Date animal collected: 04/2/2020 Time animal collected: 14:07 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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 **77.0 cm**
Total length **87.0 cm**
Length actual estimate
Mouth width (inside lips, see reverse side) **1.6 cm**
Interorbital width (see reverse side) **6.8 cm**
Weight actual estimate **3.8 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 healthy and in excellent condition. 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/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

Pelvic fin clip

How preserved

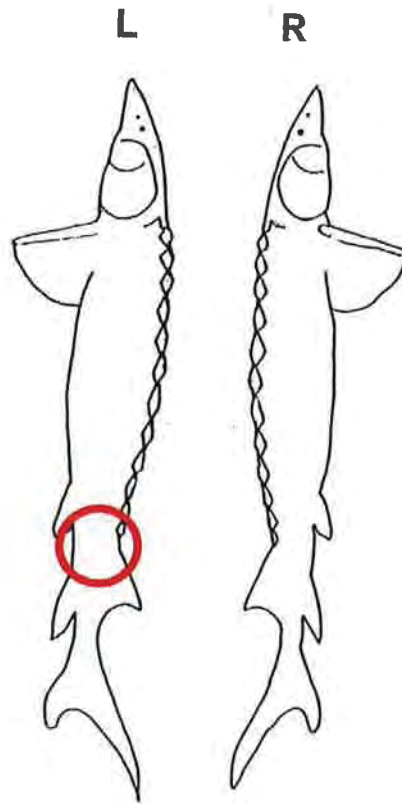
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A sixth, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:07. 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 #933000220017811. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 14:12. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no serious signs of damage. PIT was implanted, located 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 IncidentalTake@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 dorsal view, showing the size and condition of a sixth, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:07pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth. Specimen appeared to be in very good condition (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:00 pm

Date animal collected: 04/2/2020 Time animal collected: 14:15 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
 DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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 **65.0 cm**
 Total length **75.1 cm**
 Length actual estimate
 Mouth width (inside lips, see reverse side) **3.5 cm**
 Interorbital width (see reverse side) **5.6 cm**
 Weight actual estimate **1.5 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 healthy and in good condition. 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/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

Pelvic fin clip

How preserved

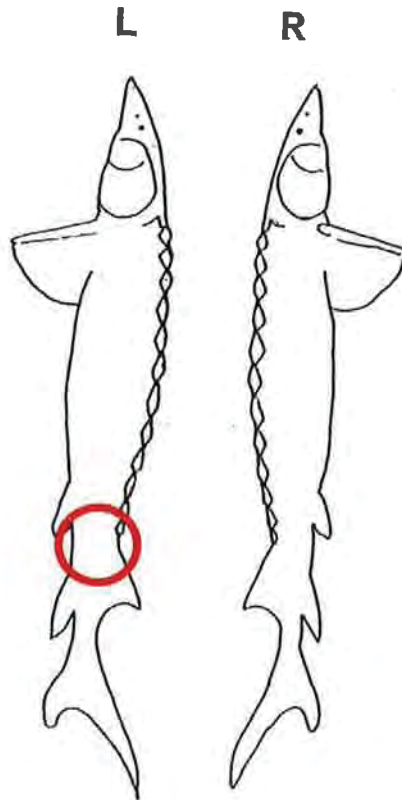
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A sixth, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:15. 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 #933000220017814. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 14:19. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



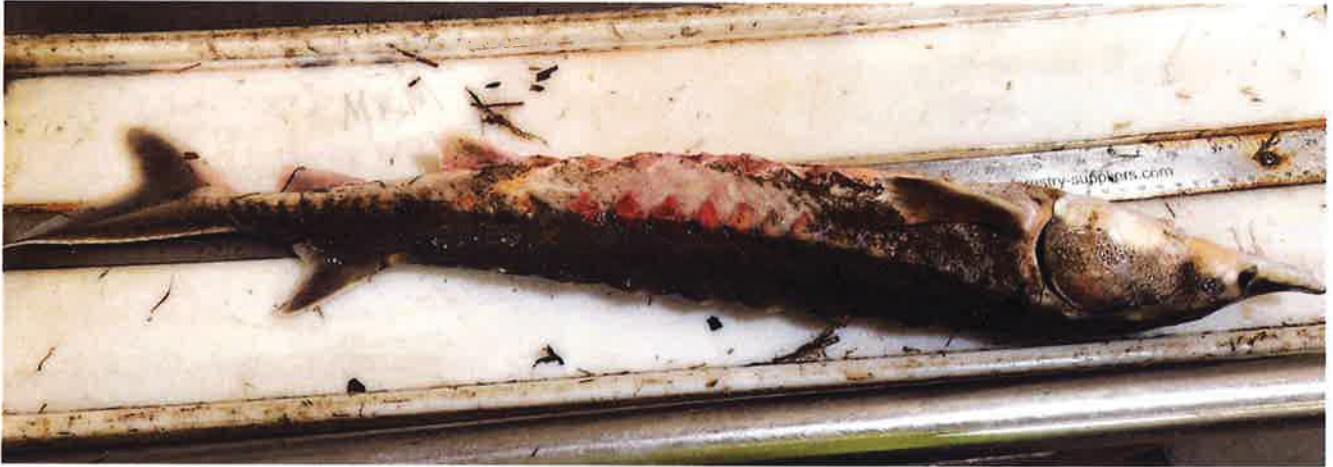
PIT tag identified just below dorsal fin

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 live at the time of collection, and had no serious signs of damage. PIT was implanted, located 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 IncidentalTake@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 sixth, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:15pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A dorsal view of the specimen. Specimen appeared to be in very good condition (04/2/2020).

Photographs



A ventral view of the specimen, showing the characteristic small mouth and elongated rostrum (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:00 pm

Date animal collected: 04/2/2020 Time animal collected: 14:20 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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:

Fork length **UNM**
Total length **UNM**
Length actual estimate
Mouth width (inside lips, see reverse side) **4.6 cm**
Interorbital width (see reverse side) **6.6cm**
Weight actual estimate **1.2 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).

Carcass Necropsied?

Yes No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

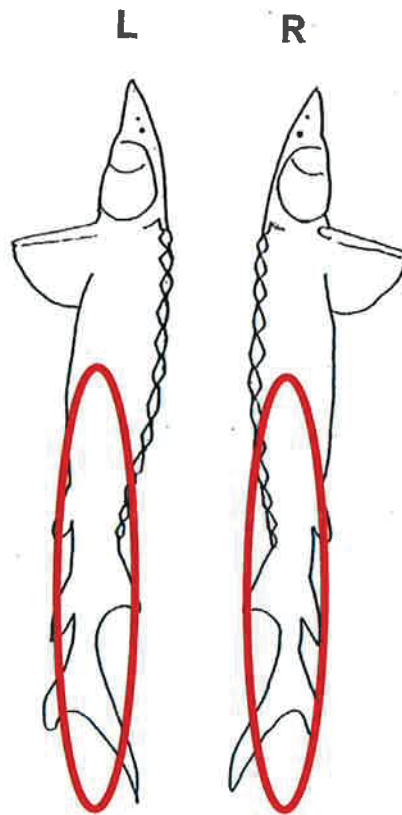
SAMPLES COLLECTED? Yes No

Sample How preserved Disposition (person, affiliation, use)

No sample collected

Comments: An eighth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:20. 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. Due to the severe damage, (posterior torso missing) a fin clip was not collected. Upon completion of processing, the 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



Specimen was missing the lower half of the torso

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 severely damaged and deceased at the time of collection. Specimen was missing the lower half of its torso (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.

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 dorsal view, showing the size and condition of an eighth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:20pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic small mouth and elongated rostrum, as well as the severe damage observed at the time of collection (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:15 pm

Date animal collected: 04/2/2020 Time animal collected: 14:24 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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 **74.4 cm**
 Total length **84.0 cm**
 Length actual estimate
 Mouth width (inside lips, see reverse side) **4.1 cm**
 Interorbital width (see reverse side) **6.3 cm**
 Weight actual estimate **1.6 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).

Carcass Necropsied?

Yes No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? Yes No

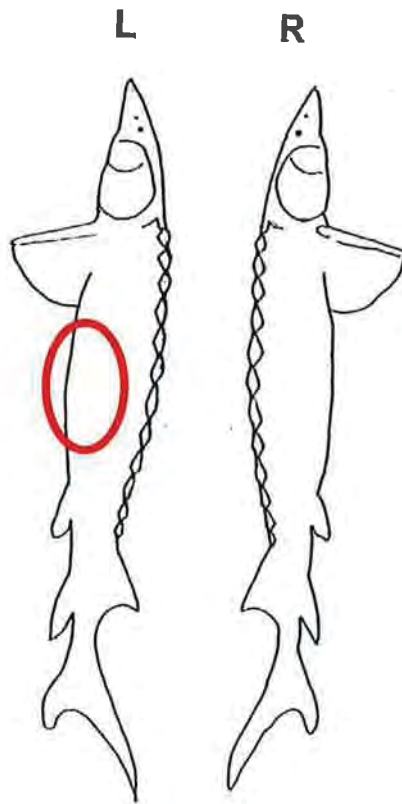
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 ninth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:24. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



**A large ventral laceration
was observed mid-torso**

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 damaged and deceased at the time of collection. A large laceration was observed along the belly, mid torso (refer to diagram above).**

Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@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

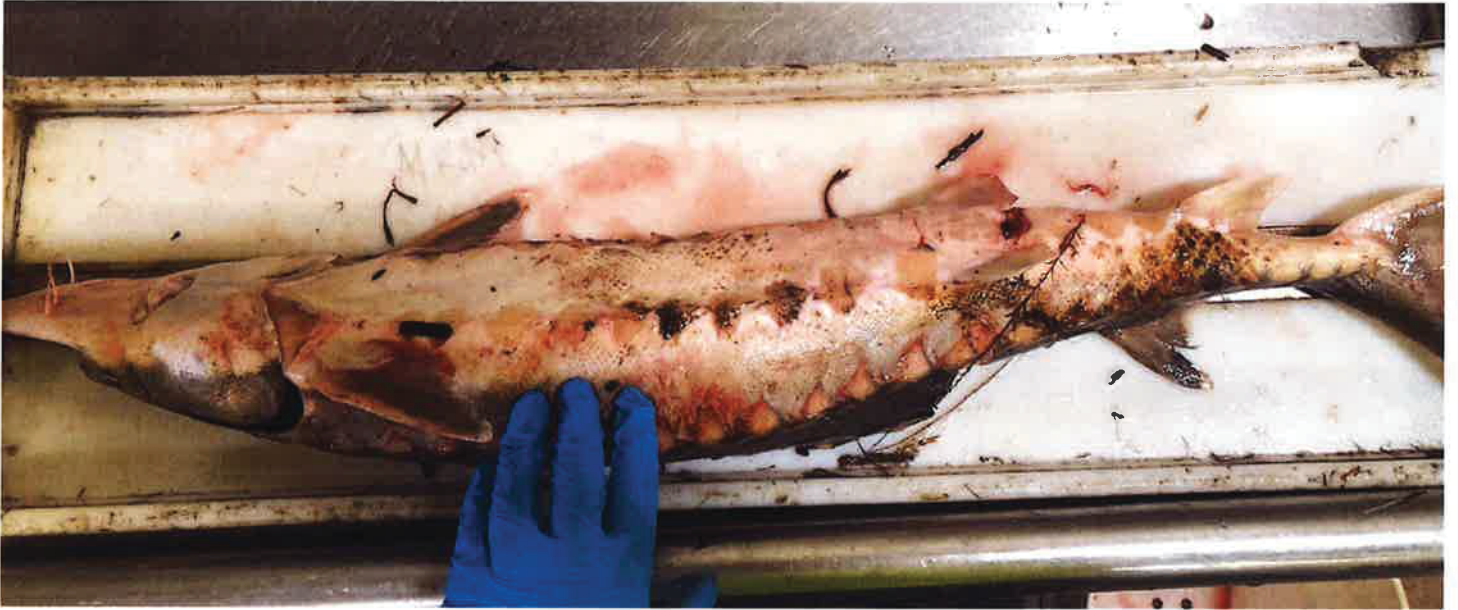


A dorsolateral view, showing the size and condition of a ninth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:24pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A dorsal view of the specimen, showing a large laceration along the lower torso (04/2/2020).

Photographs



A ventral view of the specimen. In addition to the laceration, bruising and contusions were observed ventrally along the torso (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:15 pm

Date animal collected: 04/2/2020 Time animal collected: 14:28 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First Beth Last Graham
 Agency Affiliation PSEG subcontractor Email Beth.Graham@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 2 Year 2020
 DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	<u>61.7 cm</u>
Total length	<u>70.4 cm</u>
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	<u>3.8 cm</u>
Interorbital width (see reverse side)	<u>5.6 cm</u>
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	<u>1.6 kg</u>

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).

Carcass Necropsied?

Yes No
 Date Necropsied: _____
 Necropsy Lead: _____

PHOTODOCUMENTATION:

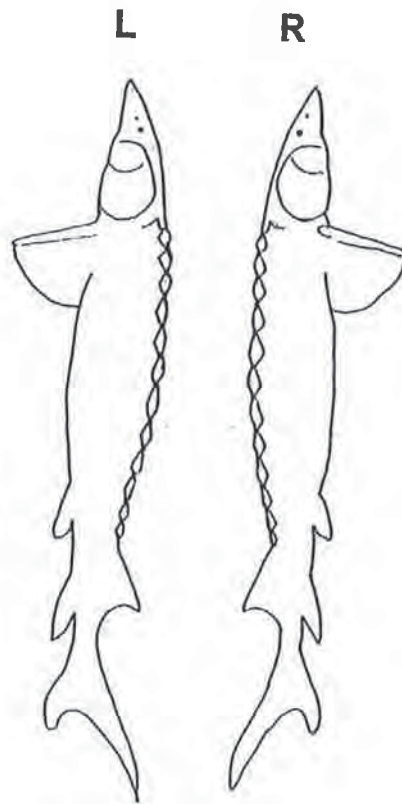
Photos/video taken? Yes No
 Disposition of Photos/Video PSEG Nuclear Environmental Affairs

SAMPLES COLLECTED? Yes No

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

Comments: A tenth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:28. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



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 collection but revealed no severe damage and only minor abrasions on the torso.**

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 dorsal view, showing the size and condition of a tenth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:28pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen. Except for some minor, bruising no severe damage was observed (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:15 pm

Date animal collected: 04/2/2020 Time animal collected: 14:32 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	68.0 cm
Total length	77.2 cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	4.3 cm
Interorbital width (see reverse side)	5.8 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	2.0 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).

Carcass Necropsied?

Yes No
 Date Necropsied: _____
 Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? Yes No
 Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

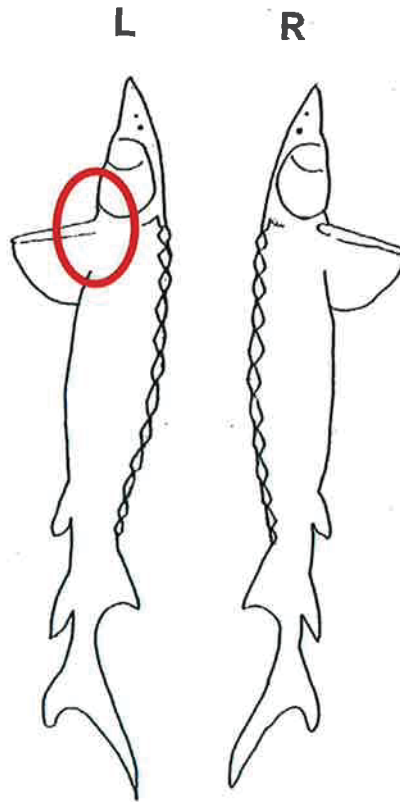
SAMPLES COLLECTED? Yes No

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: An eleventh, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:32. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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

Large laceration observed near the gills, between the pectoral fins



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 collection and revealed a laceration located near the gills, just between the pectoral fins.**

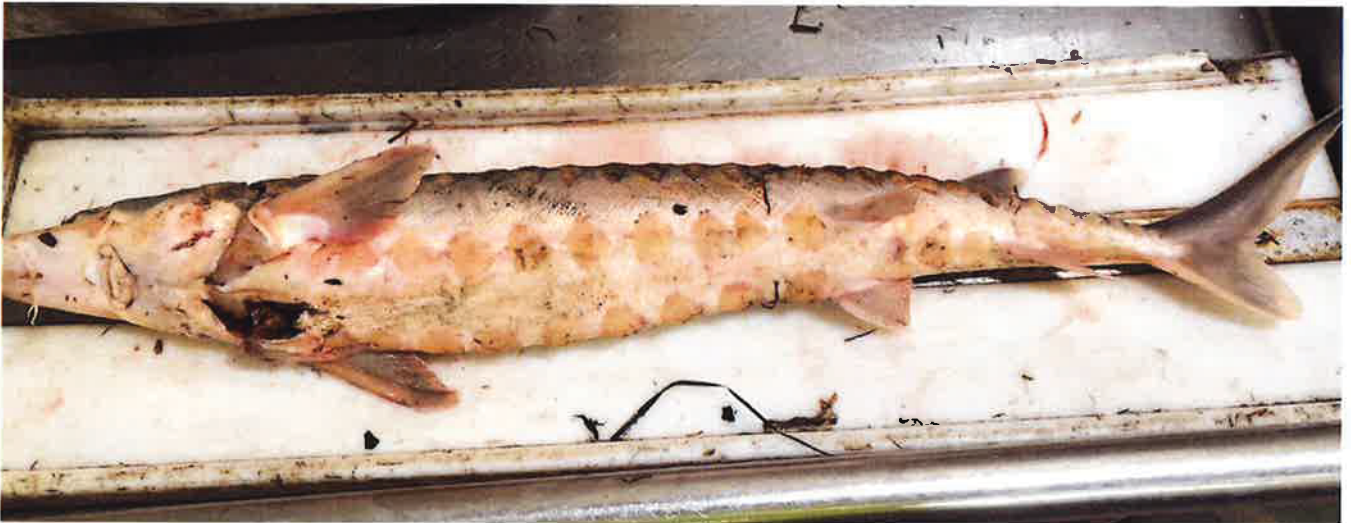
Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

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 dorsal view, showing the size and condition of an eleventh, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:32pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing damage in the form of a laceration near the gills, just between the pectoral fins (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:15 pm

Date animal collected: 04/2/2020 Time animal collected: 14:37 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	<u>59.1 cm</u>
Total length	<u>65.0 cm</u>
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	<u>UNM</u>
Interorbital width (see reverse side)	<u>UNM</u>
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	<u>1.3 kg</u>

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).

Carcass Necropsied?

Yes No
 Date Necropsied: _____
 Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? Yes No
 Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

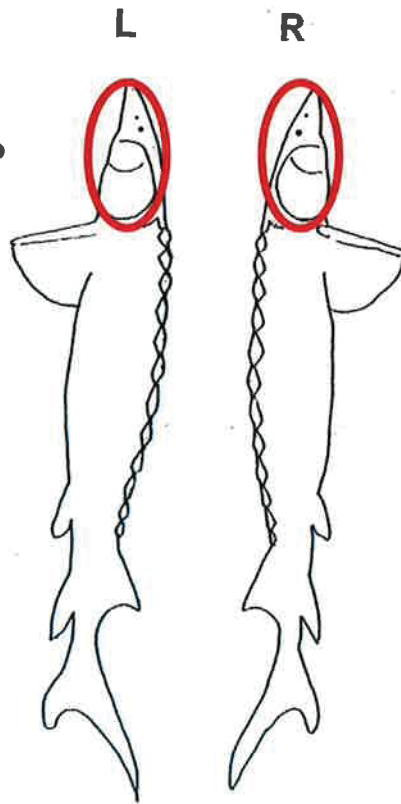
SAMPLES COLLECTED? Yes No

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 twelfth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:37. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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

Severe damage to the head, in which the skull appears to have been crushed.



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 damaged and deceased at the time of collection. The specimen's skull appears to have been crushed, and evidence of early stages of decomposition were observed (refer to diagram above)**

Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@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 dorsal view, showing the size and condition of a twelfth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:37pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing damage in the form of damage to the skull and evidence of early stages of decomposition on the ventral portion of the torso (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:15 pm

Date animal collected: 04/2/2020 Time animal collected: 14:42 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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 **57.7 cm**
 Total length **68.0 cm**
 Length actual estimate
 Mouth width (inside lips, see reverse side) **4.1 cm**
 Interorbital width (see reverse side) **5.3 cm**
 Weight actual estimate **0.4 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).

Carcass Necropsied?

Yes No
 Date Necropsied: _____
 Necropsy Lead: _____

PHOTODOCUMENTATION:

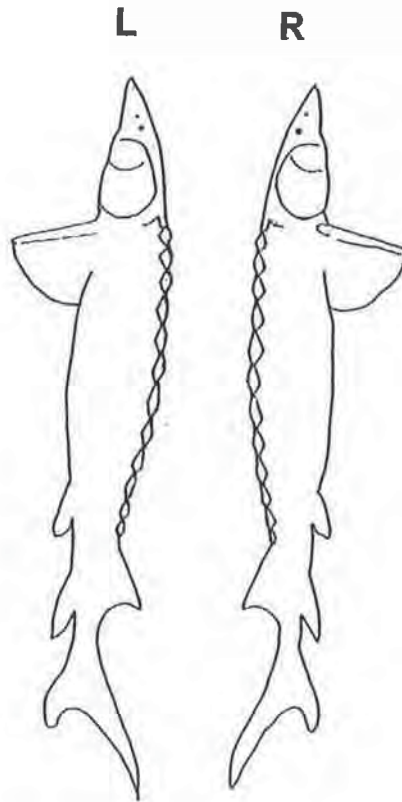
Photos/vids taken? Yes No
 Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 thirteenth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:42. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



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 collection, and shown no evidence of damage.**

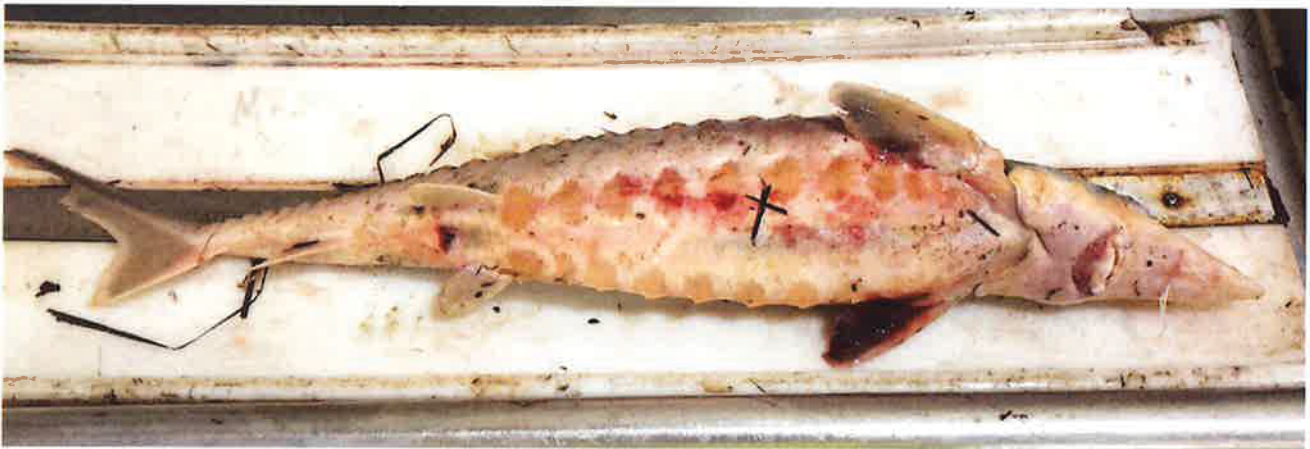
Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

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 dorsal view, showing the size and condition of a thirteenth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:42pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing existence of minor abrasions on the ventral aspect of the torso (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:30 pm

Date animal collected: 04/2/2020 Time animal collected: 14:50 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(89.0ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	65.0 cm
Total length	74.4 cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	3.8 cm
Interorbital width (see reverse side)	5.6 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	2.1 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
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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).

Carcass Necropsied?

Yes No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

Pelvic fin clip

How preserved

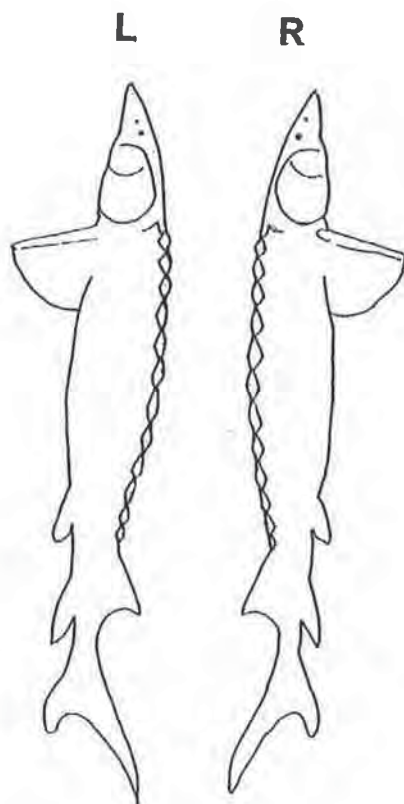
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A fourteenth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:50. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



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 collection, and shown no evidence of damage.**

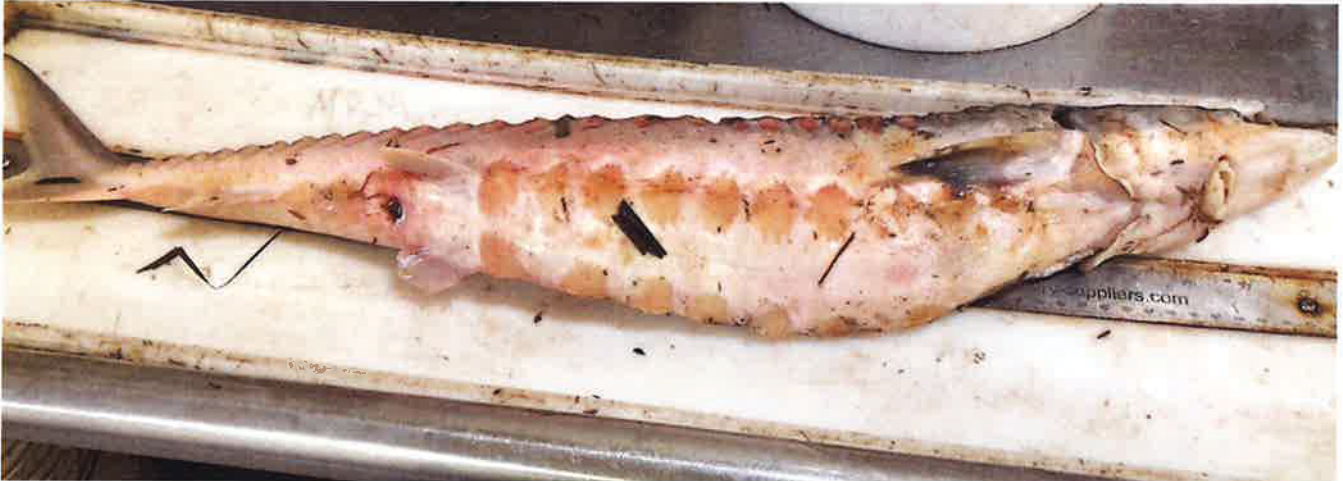
Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

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 dorsal view, showing the size and condition of a fourteenth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:50pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing no observable damage (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 14:30 pm

Date animal collected: 04/2/2020 Time animal collected: 14:52 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 13.5 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(89.0ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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 **60.4 cm**
 Total length **69.6 cm**
 Length actual estimate
 Mouth width (inside lips, see reverse side) **4.6 cm**
 Interorbital width (see reverse side) **5.6 cm**
 Weight actual estimate **1.3 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).

Carcass Necropsied?

Yes No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

Pelvic fin clip

How preserved

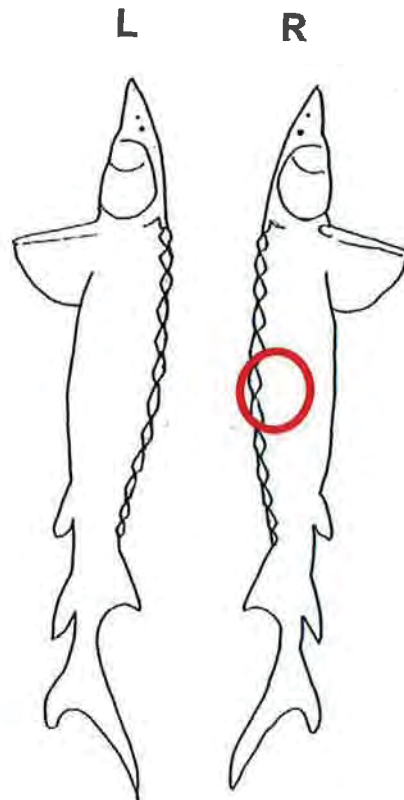
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A fifteenth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 14:52. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



Large laceration observed on the across the dorsal aspect of the torso.

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 damaged and deceased at the time of collection, and shown evidence of are large laceration across the dorsal aspect of the torso (refer to diagram above).**

Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@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 dorsal view, showing the size and condition of a fifteenth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 14:52pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the laceration observed to the upper torso has not penetrated the ventral region. Minor abrasions were also found on the ventral region of the specimen (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 10:30 am

Date animal collected: 04/2/2020 Time animal collected: 10:45 am

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 12.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb2(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.0 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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 **72.0 cm**
Total length **82.5 cm**
Length actual estimate
Mouth width (inside lips, see reverse side) **4.8 cm**
Interorbital width (see reverse side) **5.4 cm**
Weight actual estimate **2.4 kg**

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

Tag #

989001007225066

Tag Type

Location of tag on carcass
left side, below dorsalfin

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/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

Pelvic fin clip

How preserved

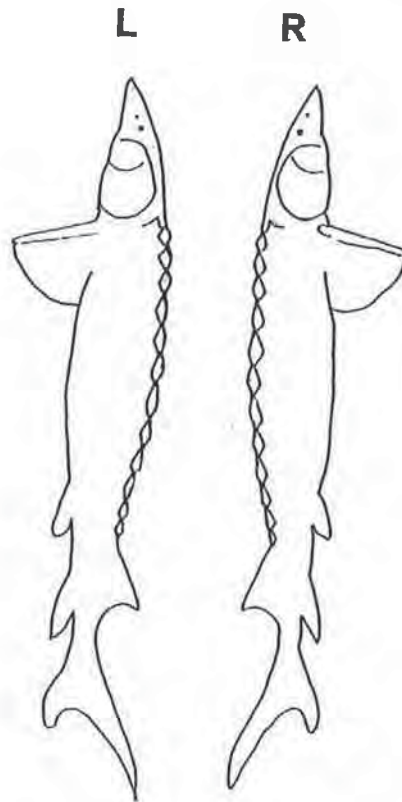
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A sixteenth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 10:45am. 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 #989001007225066. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



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 collection. Except for some minor bruising, there was no evidence of damage.**

Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@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 sixteenth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 10:45am on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A dorsal view of the specimen. Minor abrasions were found on the head and rostrum, but no severe damage was observed (04/2/2020).

Photographs



A ventral view of the head showing the characteristic small mouth and elongated rostrum (04/02/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 10:30 am

Date animal collected: 04/2/2020 Time animal collected: 10:45 am

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 12.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb2(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.0 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First Beth Last Graham
 Agency Affiliation PSEG subcontractor Email Beth.Graham@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 2 Year 2020
 DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	<u>73.0 cm</u>
Total length	<u>84.0 cm</u>
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	<u>4.7 cm</u>
Interorbital width (see reverse side)	<u>5.7 cm</u>
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	<u>2.6 kg</u>

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).

Carcass Necropsied?

Yes No

Date Necropsied: _____

Necropsy Lead: _____

PHOTODOCUMENTATION:

Photos/video taken? Yes No

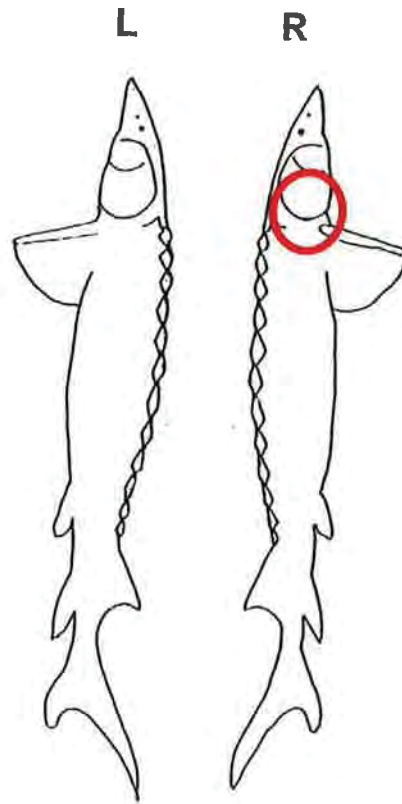
Disposition of Photos/Video PSEG Nuclear Environmental Affairs

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 seventeenth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 10:45am. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



**Large laceration observed
across the right operculum**

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 damaged and deceased at the time of collection, and shown evidence of are large laceration across the right operculum (refer to diagram above).**

Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@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 seventeenth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 10:45am on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A dorsal view of the specimen. Minor abrasions were found across the torso, in addition to a large laceration on the right side, in the area of the operculum (04/2/2020).

Photographs



A ventral view of the head showing a close up of the damage to the operculum (04/02/2020).



Ventral view of the head, showing the characteristic elongated rostrum and small mouth (04/02/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 10:30 am

Date animal collected: 04/2/2020 Time animal collected: 10:45 am

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 12.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb2(88.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 10.0 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
 DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	59.5 cm
Total length	68.0 cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	2.2 cm
Interorbital width (see reverse side)	4.7 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	1.6 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).

Carcass Necropsied?

Yes No
 Date Necropsied: _____
 Necropsy Lead: _____

PHOTODOCUMENTATION:

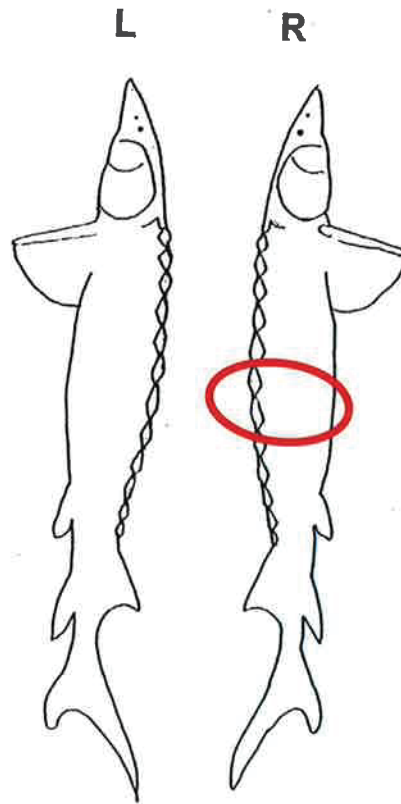
Photos/vids taken? Yes No
 Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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: An eighteenth, deceased Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 10:45am. 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. A pelvic fin clip was collected for future DNA analysis. Upon completion of processing, the 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. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



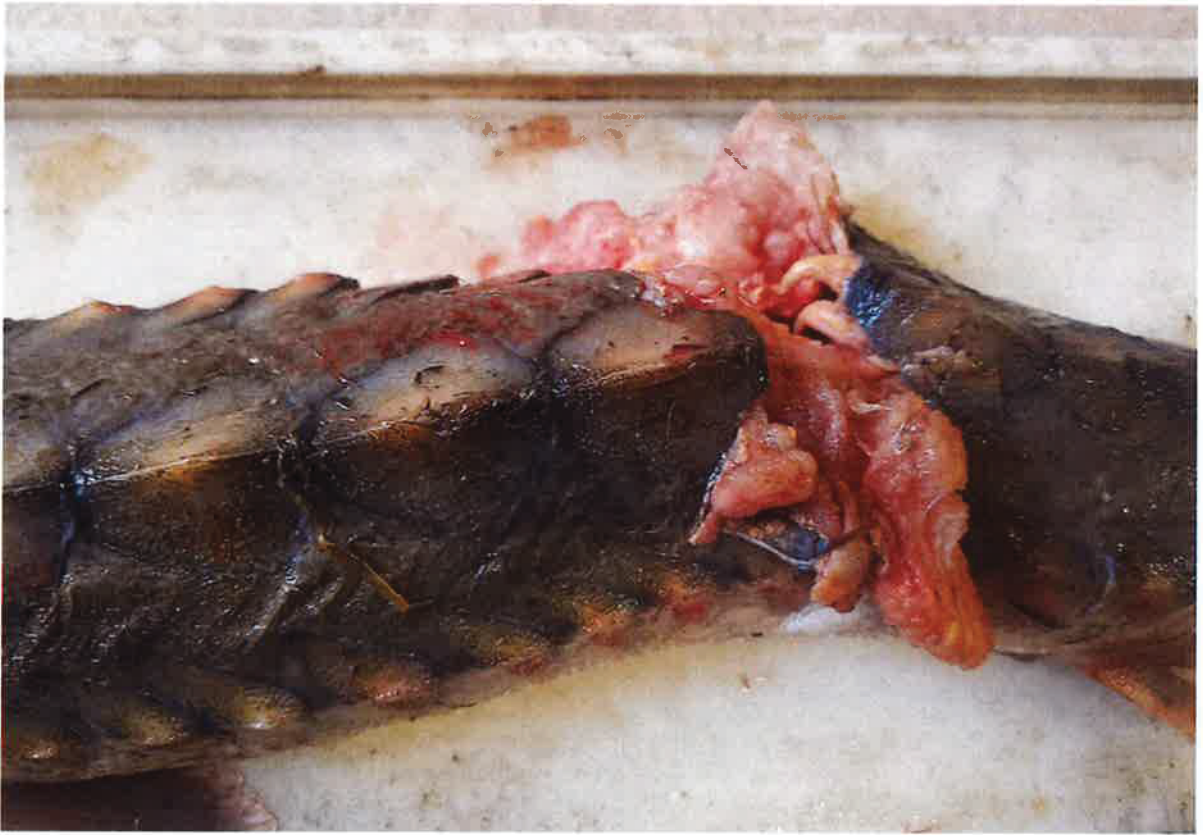
**Large laceration observed
across the right side,
approximately mid torso**

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 damaged and deceased at the time of collection, and shown evidence of are large laceration across the right torso (refer to diagram above).**

Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@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 close up view of the sever laceration located mid-torso on the specimen (04/02/2020).



Ventral view of the head, showing the characteristic elongated rostrum and small mouth (04/02/2020).

Photographs



A dorsolateral view, showing the size and condition of an eighteenth, deceased Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 10:45am on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A dorsal view of the specimen. Minor abrasions were found across the torso, in addition to a large laceration on the right side, mid-torso (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 15:00 pm

Date animal collected: 04/2/2020 Time animal collected: 1550 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 14.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb Slk(88.0ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 11.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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	82.0cm
Total length	94.2cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	4.1cm
Interorbital width (see reverse side)	6.8 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	3.1kg

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 healthy and in excellent condition. 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/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

How preserved

Disposition (person, affiliation, use)

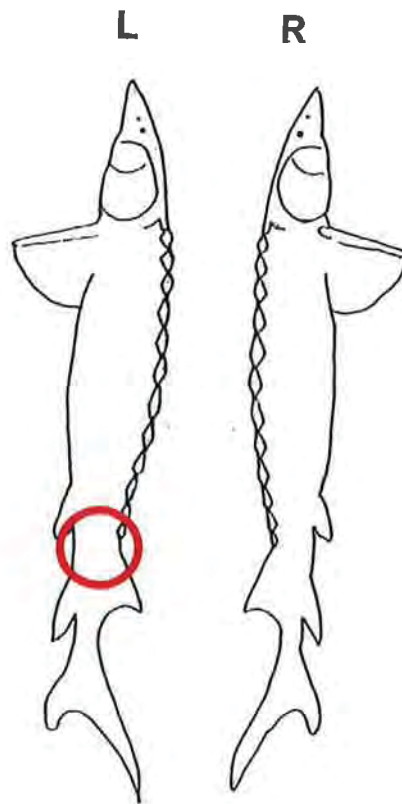
Pelvic fin clip

stored in non-denatured ethanol and refrigerated.

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A nineteenth, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 15:50. 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 #933000320184020. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 15:55pm. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage. A PIT was identified, located 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 IncidentalTake@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 nineteenth, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 15:50 pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 15:00 pm

Date animal collected: 04/2/2020 Time animal collected: 1557 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 14.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(90.5ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 11.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	77.0cm
Total length	85.3cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	4.3cm
Interorbital width (see reverse side)	6.9 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	3.4 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 healthy and in excellent condition. 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:

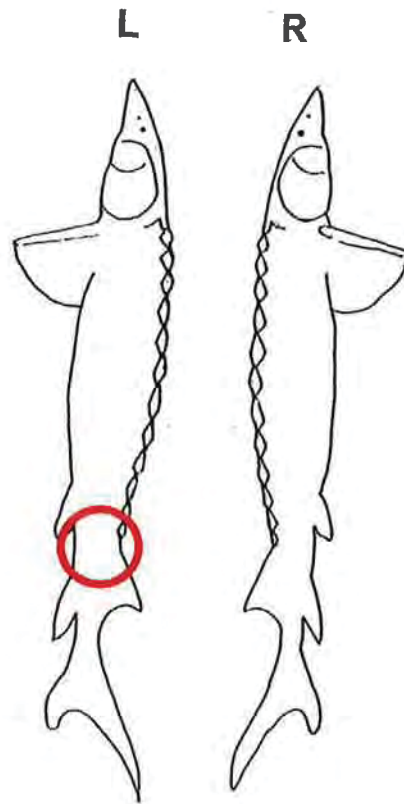
Photos/video taken? Yes No
 Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 twentieth, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 15:57. 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 #933000320184019. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 16:05pm. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



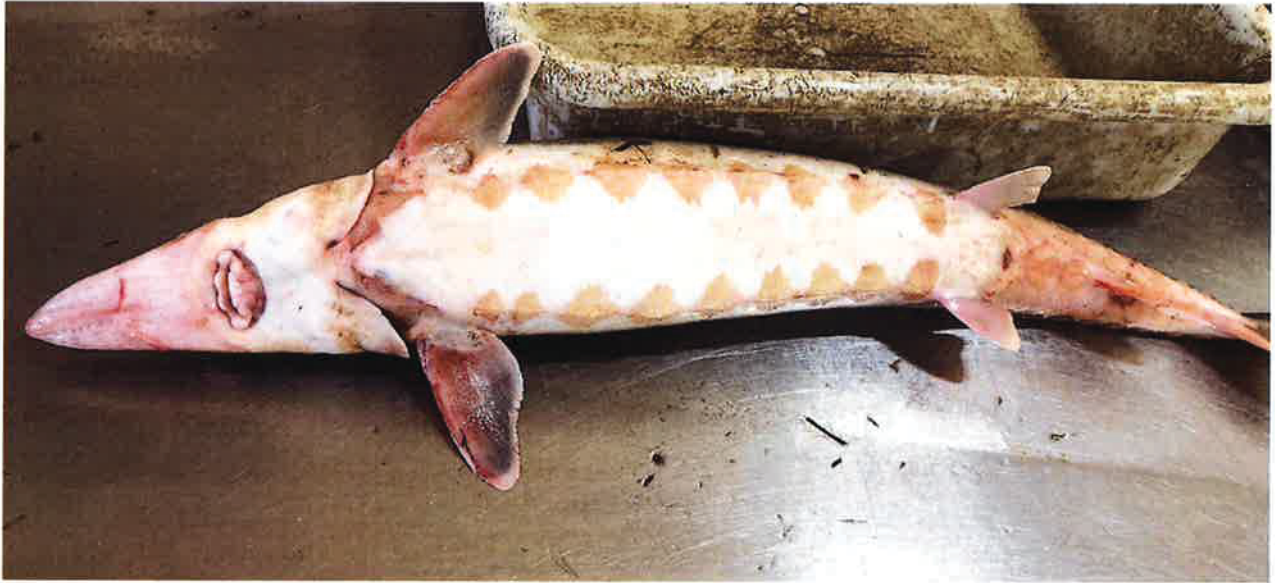
PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage. A PIT was identified, located below the dorsal fin, on the left side (refer to diagram above).**

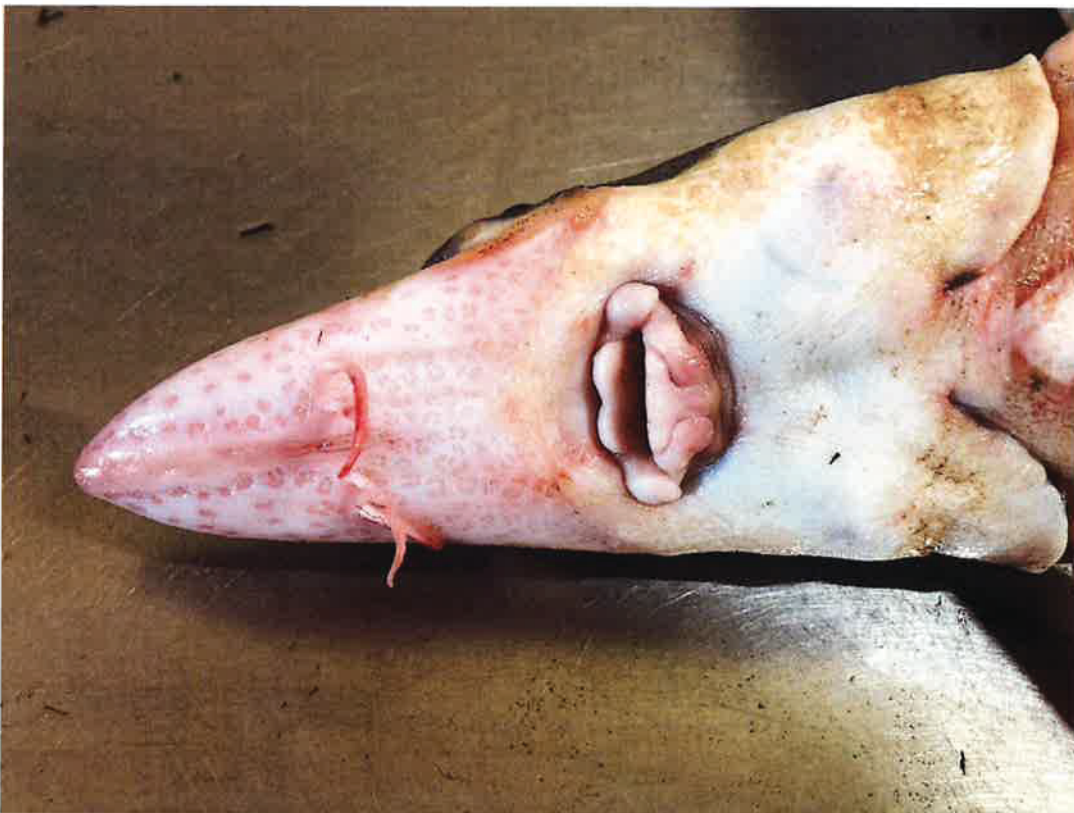
Submit completed forms (within 24 hours of observation of fish): by e-mail to IncidentalTake@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

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 ventral view showing the size and condition of a twentieth, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 15:57 pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification: Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 15:00 pm

Date animal collected: 04/2/2020 Time animal collected: 16:07 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 14.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(91.0 ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 11.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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 **71.0 cm**
Total length **82.0 cm**
Length actual estimate
Mouth width (inside lips, see reverse side) **4.3 cm**
Interorbital width (see reverse side) **5.8 cm**
Weight actual estimate **2.0 kg**

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

Tag #

989001007251920

Tag Type

Location of tag on carcass

left side, below dorsalfin

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 healthy and in excellent condition. 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/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

Pelvic fin clip

How preserved

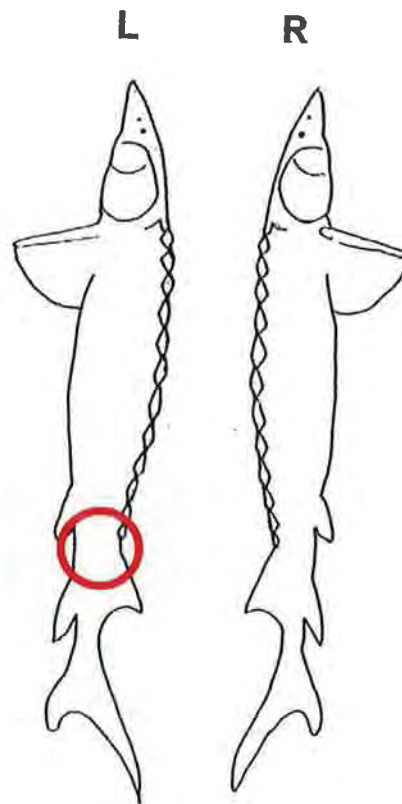
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A twenty-first, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 16:07. 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 a PIT was indicated, identified as #989001007251920. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 16:10pm. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage, except for minor abrasions. A PIT was identified, located 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 IncidentalTake@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 ventral view showing the size and condition of a twentyfirst, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 16:07 pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 15:00 pm

Date animal collected: 04/2/2020 Time animal collected: 16:12 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 14.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(91.0 ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 11.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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 **74.0 cm**
Total length **86.0 cm**
Length actual estimate
Mouth width (inside lips, see reverse side) **4.6 cm**
Interorbital width (see reverse side) **6.6 cm**
Weight actual estimate **2.7 kg**

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

Tag # **989001007251908** Tag Type _____ Location of tag on carcass **left side, below dorsalfin**

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 healthy and in excellent condition. 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/video taken? Yes No

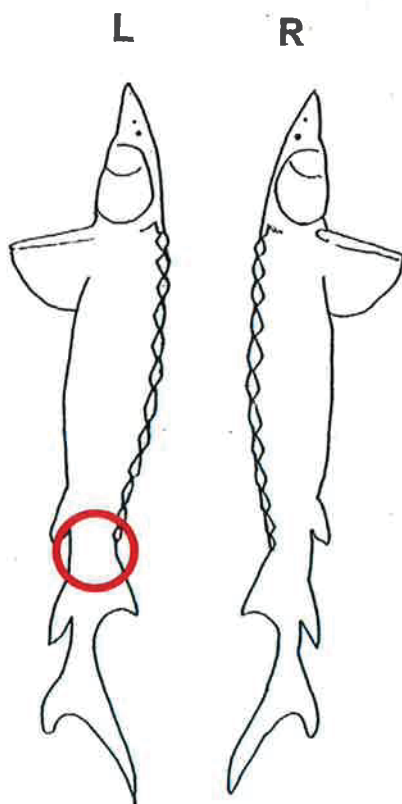
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 twenty-second, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/02/20, at 16:12. 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 a PIT was indicated, identified as #989001007251920. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 16:17pm. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage. A PIT was identified, located 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 IncidentalTake@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 ventral view showing the size and condition of a twenty-second, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 16:12 pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 15:00 pm

Date animal collected: 04/2/2020 Time animal collected: 16:17 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 14.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL1(91.0 ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 11.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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	67.0 cm
Total length	76.2 cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	4.1 cm
Interorbital width (see reverse side)	5.6 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	2.6 kg

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

Tag #

989001007251032

Tag Type

Location of tag on carcass
left side, below dorsal fin

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 healthy and in excellent condition. 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/video taken? Yes No

Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

SAMPLES COLLECTED? Yes No

Sample

Pelvic fin clip

How preserved

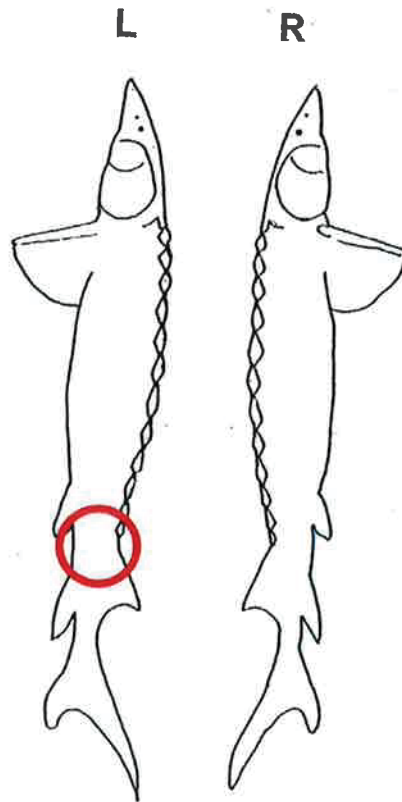
stored in non-denatured ethanol and refrigerated.

Disposition (person, affiliation, use)

Held at the office of ECSI for aggregated shipment to designated laboratory.

Comments: A twenty-third, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/02/20, at 16:17. 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 a PIT was indicated, identified as #989001007251032. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 16:20pm. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage. A PIT was identified, located 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 IncidentalTake@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

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Photographs



A dorsal view showing the size and condition of a twenty-third, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 16:17 pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 15:00 pm

Date animal collected: 04/2/2020 Time animal collected: 16:20 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 14.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- Ebb Sik(88.0ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 11.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
 Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
 Month 04 Day 2 Year 2020

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) intake 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	66.0cm
Total length	69.3cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	3.3 cm
Interorbital width (see reverse side)	5.1 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	1.6kg

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 healthy and in excellent condition. 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:

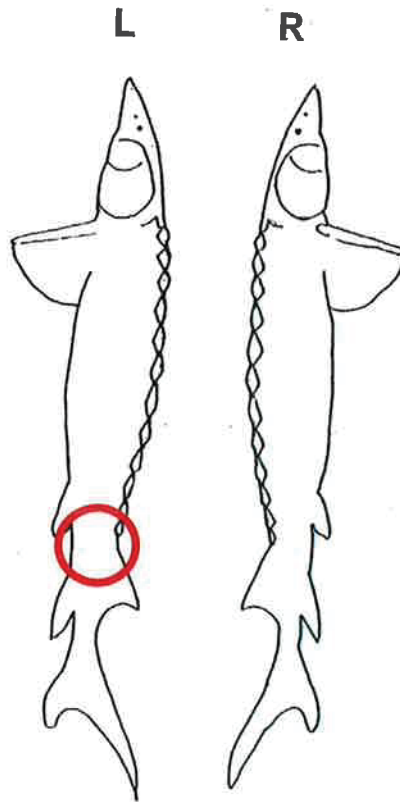
Photos/video taken? Yes No
 Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 twenty-fourth, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 16:20. 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 #933000320184005. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 16:26pm. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage. A PIT was identified, located 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 IncidentalTake@noaa.gov or by fax (978-281-9394). Questions can be directed to NMFS Protected Resources Division at 978-281-9328.

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Photographs



A dorsolateral view showing the size and condition of a twenty-four, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 16:20 pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).

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: Beth Graham (Environmental Consulting Services, Inc. [ECSI])

Reporter's full name: Beth Graham

Species Identification : Atlantic sturgeon (Acipenser oxyrinchus)

Site of Collection: PSEG Salem Generating Station; Circulating Water Intake

Date animal observed: 04/2/2020 Time animal observed: 15:00 pm

Date animal collected: 04/2/2020 Time animal collected: 16:28 pm

Environmental conditions at time of observation (i.e., tidal stage, weather):

Air temp. – 14.0 °C; Sal. – 5.0 ppt; Wind – NW; sky – clear; Wave – rough; tide- FL2(91.5 ft)

If removed from intakes (trash racks or traveling screens):

Date and time of last inspection of screen: 04/2/2020; at 12:01am

Water temperature (°C) at site and time of observation: 11.5 °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: 100.0% /Unit 2: 95.2%

Average percent of power generating capacity achieved per unit over the 48 hours previous to observation: Unit 1: 100.1% /Unit 2: 95.5%

STURGEON DATA COLLECTION FORM

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

OBSERVER'S CONTACT INFORMATION

Name: First **Beth** Last **Graham**
Agency Affiliation **PSEG subcontractor** Email **Beth.Graham@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 2 Year 2020
DATE EXAMINED:
Month 04 Day 2 Year 2020

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) intake 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	82.0cm
Total length	92.4cm
Length <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	
Mouth width (inside lips, see reverse side)	5.1 cm
Interorbital width (see reverse side)	7.1 cm
Weight <input checked="" type="checkbox"/> actual <input type="checkbox"/> estimate	3.9kg

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 healthy and in excellent condition. 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/video taken? Yes No

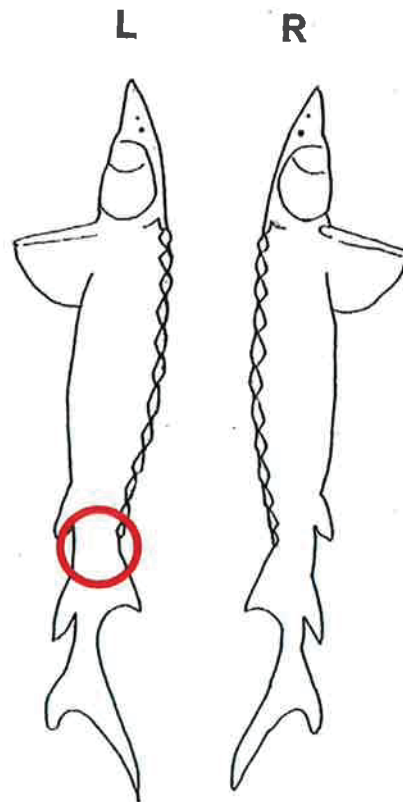
Disposition of Photos/Video **PSEG Nuclear Environmental Affairs**

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 twenty-fifth, live Atlantic sturgeon was collected from the Salem Circulating Water Intake Structure during routine trash rack cleaning on 04/2/20, at 16:28. 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 #933000320184010. A pelvic fin clip was also collected for future DNA analysis. Upon completion of processing, the specimen was released back to the Delaware River at 16:32pm. The fin clip sample has been stored in refrigeration and will be held for aggregated shipment to a designated laboratory.

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



PIT tag identified just below dorsal fin

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 live at the time of collection, and had no obvious signs of damage. A PIT was identified, located 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](mailto:IncidentalTake@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 twenty-fifth, live Atlantic sturgeon (*Acipenser oxyrinchus*), retrieved at approximately 16:28 pm on 04/2/2020 from the Salem Circulating Water Intake by Salem Yard Crew personnel during routine trash rack cleaning at Salem Nuclear Generating Station (04/2/2020).



A ventral view of the specimen, showing the characteristic elongated rostrum and small mouth (04/2/2020).