

A. PROJECT MANAGEMENT

A1. TITLE AND APPROVAL

QUALITY ASSURANCE PROJECT PLAN LONG ISLAND SOUND AND PECONIC ESTUARY EELGRASS MAPPING

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ISLAND

FEBRUARY 2023
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A1.1. Signature Page

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A2.1. Document Control Information

Revised By	Date	Version	Summary of Changes

A3. QAPP DISTRIBUTION LIST

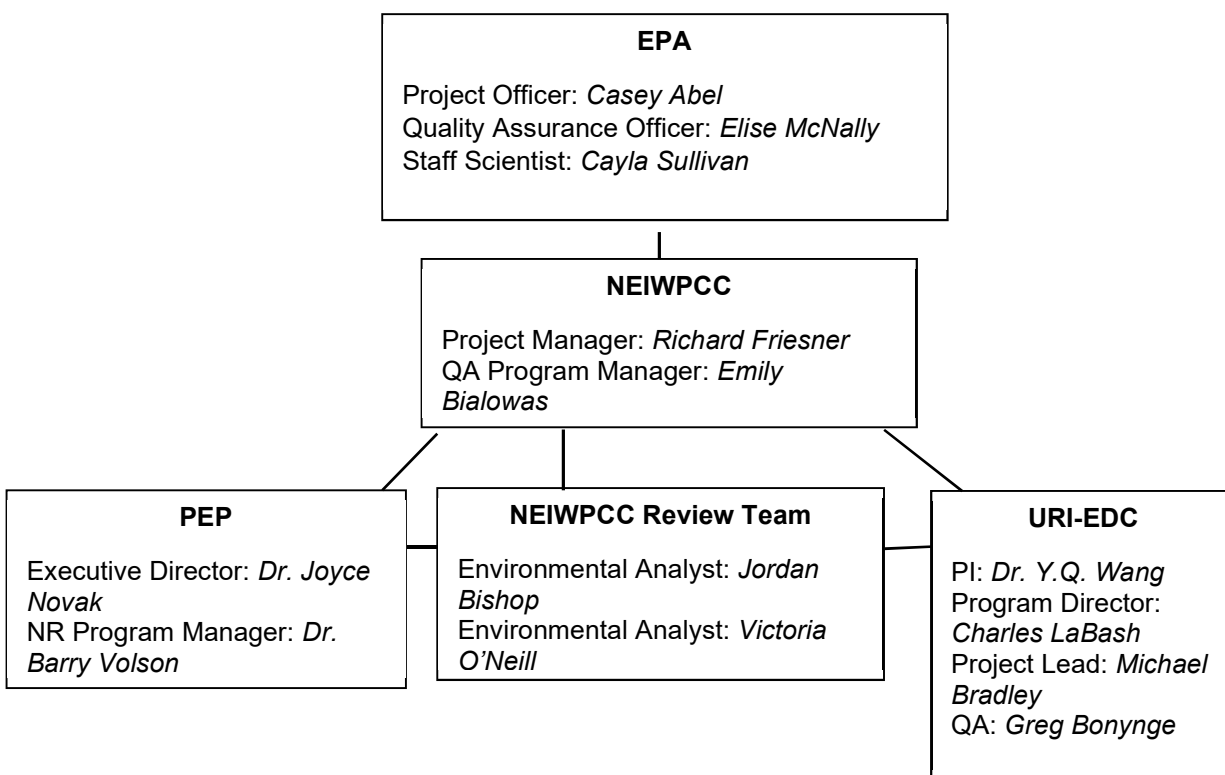
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A4. PROJECT ORGANIZATION AND RESPONSIBILITIES

The URI-EDC staff and key partners will be responsible for carrying out this project including data gathering and analyses, summarizing and synthesizing data, writing/editing/reviewing the project report. More details are provided in the following list of project participants and their responsibilities:

- **USEPA Project Officer:** Casey Abel
 - Responsible for reviewing drafts of deliverables and approving the final deliverables.
- **NEIWPCC Project Manager:** Richard Friesner
 - Responsible for overseeing implementation of the project work plan, reviewing drafts of deliverables, approving final deliverables, managing the project budget, and processing invoices.
- **NEIWPCC QA Program Manager:** Emily Bialowas
 - Responsible for maintaining NEIWPCC Quality Management Plan; reviews the project QAPP and subsequent revisions in terms of quality assurance and project goals or designates authorized staff to do the same.
- **NEIWPCC Project Reviewer:** Victoria O'Neill
 - Responsible for technical input and project coordination on between LISS and NYSDEC.
- **NEIWPCC Project Reviewer:** Jordan Bishop
 - Responsible for technical input, project management and coordination between NEIWPCC, LISS, URI, and NYSDEC. Jordan will be responsible for approving QAPP while Victoria O'Neill is away on leave until Summer 2023.
- **URI-EDC: Principal Investigator:** Y.Q. Wang, Professor, University of Rhode Island, Department of Natural Resources Sciences
 - Responsible for project oversight.
- **URI-EDC Program Manager:** Charles LaBash
 - Responsible project administration and managing project budget.
- **URI-EDC Project Lead:** Michael Bradley
 - Responsible for overseeing implementation of the project work plan, writing and finalizing all project reports (including QAPP and quarterly reports), GIS analysis and database development for the project.
- **URI-EDC: GIS Specialist:** Michael Bradley
 - Responsible for all GIS analysis and mapping for the project.
- **URI-EDC: QA Program Manager:** Greg Bonyngne

- Responsible for QA through the project. Reviews the project QAPP and subsequent revisions in terms of quality assurance, adherence to QAPP, and notes revisions or deviations from the QAPP.
- **Peconic Estuary Partnership: Natural Resource Program Manager:** Barry Volson
 - Responsible for coordination of the Peconic Estuary eelgrass mapping efforts and field work along with URI-EDC Project Lead Mike Bradley.



A5. PROBLEM DEFINITION/BACKGROUND

Z. marina L. (common name eelgrass) is a common species of submerged aquatic vegetation found in shallow subtidal (<10m water depth) environments of Long Island Sound (LIS) and the Peconic Estuary (PE). Eelgrass is a perennial flowering plant that propagates mainly via rhizomes (roots) that grow horizontally and sprout new blades and shoots to form dense hummocky patches (1m²) and continuous meadows (beds) some of which can be many hectares in size. These habitats are critically important in estuarine ecosystems providing nursery areas for commercially and recreationally important fisheries, storage of nutrients and carbon, filtering of particulates from the water column, and development of subaqueous soils (Dennison et al. 1993; Hughes et al.,

2009; Bradley and Stolt, 2006). In addition, eelgrass meadows play a key role in global climate change as they function as sinks for carbon storage (blue carbon), holding as much carbon as temperate forest ecosystems (Rohr et al., 2018).

Eelgrass can be sensitive to environmental changes such as eutrophication and as such its presence or absence is regarded as a biological indicator of a functioning estuarine ecosystem (Hughes et al., 2009). Because of its importance, eelgrass is protected under the EPAs Clean Water Act and thus is considered a target species within the LIS Comprehensive Conservation and Management Plan (CCMP) (LISS, 2015). In addition, 'eelgrass extent' is recognized as part of the major theme of "Thriving Habitats and Abundant Wildlife" within the CCMP (LISS, 2015).

Mapping the distribution and extent of eelgrass is a critical first step in understanding, managing, and protecting shallow-subtidal estuarine habitats (Stolt et al., 2011). GIS data provide essential baseline information for government agencies, municipalities, and the scientific community. Neckles et al. (2012) proposed a 3-tiered hierarchal strategy for mapping and monitoring SAV in estuaries of the northeastern U.S. The smallest scale of these tiers (Tier 1), utilizes true-color aerial photography whereby photo signatures of eelgrass patches or meadows are interpreted by eye and delineated using orthophotography (aerial photographs with the distortion removed) as a base map.

Tier 1 mapping projects have successfully mapped the aerial extent of eelgrass for over 25 years in Rhode Island, Massachusetts, and the Chesapeake. In the Chesapeake for example, Tier 1 SAV surveys are done on a yearly basis (Orth et al., 2019). Within LIS, eelgrass has been mapped five times beginning in 2002 (Figure 1) with the last survey conducted in 2017 (Bradley and Paton, 2018). The last Tier 1 comprehensive survey for eelgrass extent in the PE was done in 2014 (Pickerell and Schott, 2016).

This project will continue the Tier 1 mapping efforts in LIS and the PEP with the goal of developing a GIS database identifying the location of eelgrass and quantifying its aerial extent (acres, hectares) for 2023. These data may be used for map figures, future trends analysis, as well as adding to conservation and management plans.

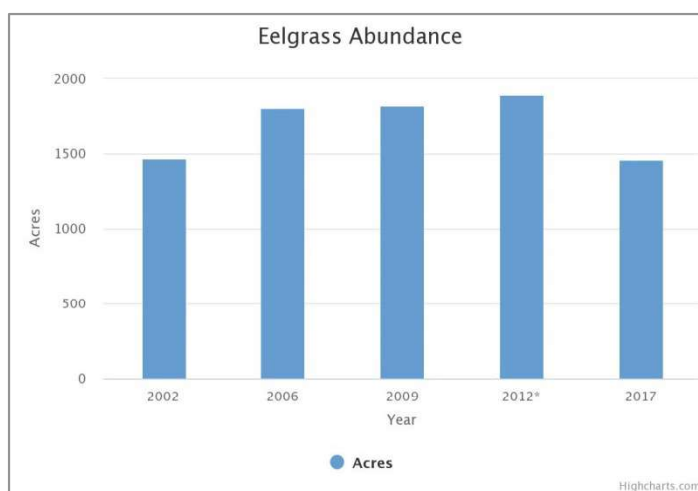


Figure 1. The results of Tier 1 eelgrass mapping efforts for LIS from 2002 to 2017 (from <https://longislandsoundstudy.net>)

A6. PROJECT/TASK DESCRIPTION

A6.1. Deliverable(s)

Upon completion, this project will deliver:

1. A GIS database and metadata of eelgrass polygons for 2023
2. Orthophotography mosaic from the aerial photo acquisition done for this project

3. A GIS database of underwater video collected during the field surveys
4. A web map of eelgrass and underwater video data collected during this project
5. A final report of all findings

A6.2. Description

This project will identify and delineate eelgrass beds that have more than 5% cover and are larger than or equal to 0.25 acres in eastern LIS and the Peconic Estuary. However, the minimum mapping unit will be 0.02 acres (1000ft²). We will use two primary sources of data to achieve this goal: aerial imagery taken to maximize the identification of eelgrass photo-signatures and field surveys with an underwater video camera (Figure 2).

Aerial imagery and the orthophotography product for use in this project will be acquired by contract with the NY State Department of Environmental Conservation and the USGS Water Services Center. The aerial imagery will be acquired during low tide, sun angles and surface wind speeds in order to maximize water clarity. The underwater video surveys will take place at the boat captain's discretion for weather conditions. However, optimal boat conditions and video acquisition conditions typically coincide (i.e., light surface winds).



Figure 2. A photo of the eelgrass field survey set-up including the underwater video camera (1) and console including real-time video feed (3), the sub-meter GPS (2) linked to tablet (4). GPS used for video water mark, and intrepid boat captain (6).

Once draft orthophotography (ortho-corrected but not color balanced or mosaicked) has been delivered to URI (planned for August 2023), initial eelgrass delineations and areas to be ground-truthed for LIS and PE will be identified by eye and digitized on-screen by hand using the vector feature editing tools in ArcGIS. Historical data sets (including GPS ground truth points) will also be used as supplemental sources to aid in photo interpretation. Areas that have historically supported eelgrass will be targeted for the photo interpretation of new beds. However, to avoid any bias digitizing of polygons will always be done with the historical data sets turned off. All digitizing will be conducted at approximately a scale of 1:1500. Delivery of the draft orthophotography product ensures that the field surveys will be conducted during the same growing season (calendar year) as when the aerial photography was acquired.

Field surveys will be conducted by boat in the same year as the aerial orthophotography was acquired (2023) in order to minimize any variability in eelgrass extent from one year to the next. Field surveys will be conducted from August to October and will utilize a tethered underwater video camera linked to an on-board GPS (Seaviewer Inc). All underwater video field surveys will

be recorded using an SDI DVR which is part of SeaViewer on-board video console (Figure 3). An example video collected during the 2017 LIS mapping effort may be found here: <https://www.youtube.com/watch?v=gmvjFSKlrEM>.

In addition, a GPS-enabled tablet will be used to navigate to the initial eelgrass delineations and areas-to-be-ground truthed. Underwater video tracks of the eelgrass bed will be conducted from



Figure 3. The underwater video camera system consists of several parts including video console (1-6) and camera (7-9): (1) Garmin differential GPS linked via cable and serial port to video overlay system (video water mark); (2) Proteus video overlay system with keyboard to input text (site name e.g.) on video files; (3) real-time video monitor; (4) external battery; (5) light controller and video capture settings; (6) digital video recorder with USB storage; (7) cable and management systems for tethered camera; (8) Seadrop camera; (9) down rigger weights. Not shown: camera stabilizing fin.

deepwater into the middle of the eelgrass bed thus capturing the location of the deepwater extent of eelgrass at that site. Another focus of the field surveys will be areas of eelgrass loss or gain between 2017 and 2023. These areas will be prioritized during the field surveys in order to verify any changes in eelgrass areal extent. Every polygon larger than 0.25 acres will be field visited. These recordings will be used for interpretation of eelgrass, delineation of eelgrass polygons, and archiving purposes. Underwater video track lines will be generated using the watermarked GPS coordinates on the video recordings.

After the field work has concluded, the underwater video recordings are converted into GIS track lines and points of eelgrass presence or absence. Other benthic data (sand, rocks, and algae) will also be interpreted. After final delivery of the orthophotography product (in Geotiff format; 1m accuracy), a mosaic of the tiled orthophotography is created using the mosaic dataset tools in ArcGIS. This mosaic is used as the base map for the final delineations of eelgrass polygons along with the interpreted points from the underwater video (ArcGIS file geodatabase format).

A6.3. Schedule

Task #	Task Title	Description	Start Date	End Date
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1	QAPP	Draft delivery of QAPP and finalization	December 2022	June 2023
2	Field work logistics	Coordinate field surveys with PEP and LIS partners	April 2023	June 2023
3	Initial photo interpretation	Photo interpretation and analysis of draft orthophotography	July 2023	October
4	Field surveys	Field survey of eelgrass with underwater video camera	August 20203	October 2023
5	Analysis and management of underwater video files	Interpretation and GIS conversion of underwater video files	November 2023	December 2023
6	Finalization of eelgrass polygons and GIS database	Reconciliation of initial eelgrass delineations with underwater video data	December 2023	January 2024
7	Trend analysis and report writing	GIS analysis; accuracy assessment; and report writing	February 2024	June 2024
8	QAPP End Date	Project closed; deliverables completed.		July 2024

A6.4. Geographical Locations

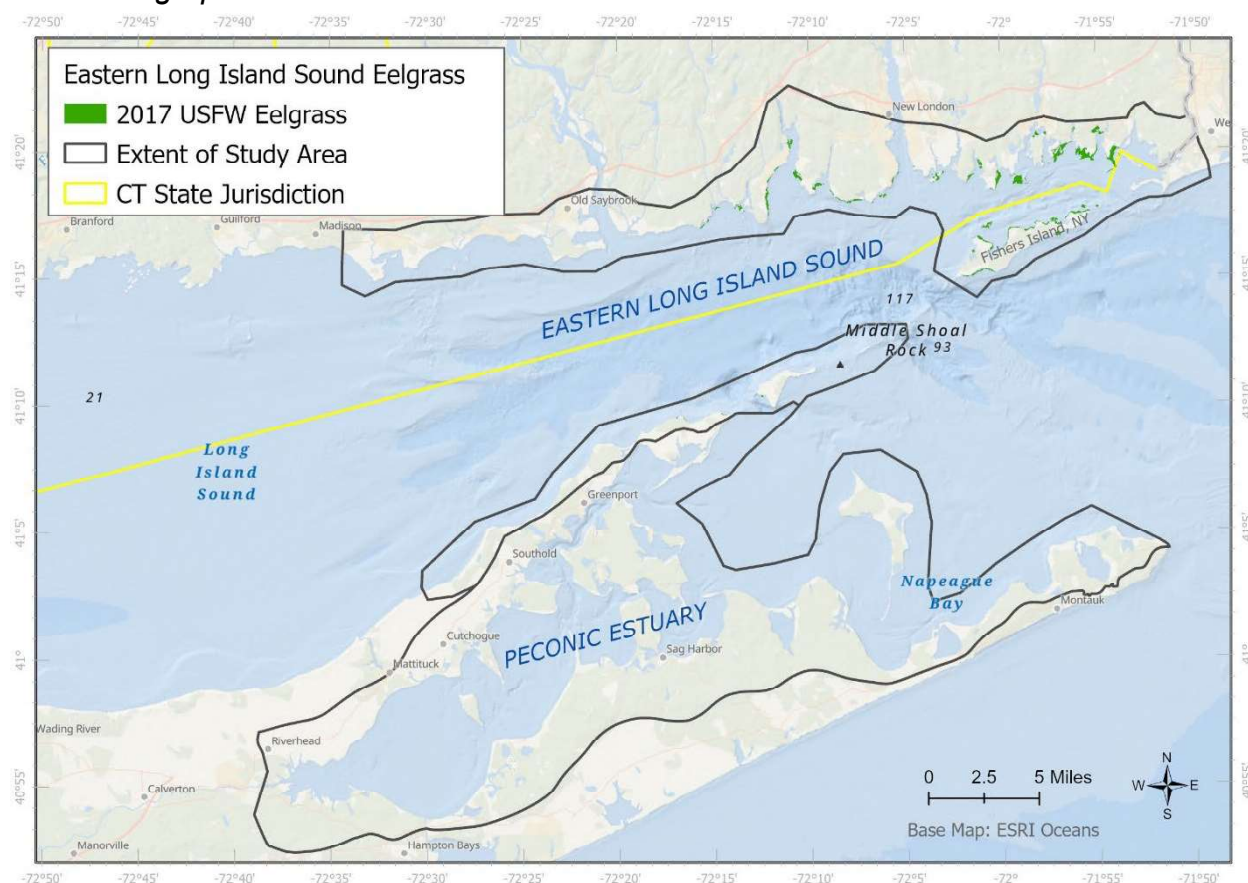


Figure 4. The study area for the 2023 Tier 1 mapping surveys includes eastern Long Island Sound and the Peconic Estuary.

A6.5. Resources and Time Constraints

The primary constraint on this project is weather. The aerial imagery acquisition is scheduled for morning low tide periods from 1 June to 31 July (approximately 24 days). Significant rainfall, moderate to high winds, or cloud cover will disrupt the aerial acquisition process.

The field surveys are also dependent on weather. These surveys take place after the aerial photography has been acquired (usually August - October). Unfortunately, tropical storms and hurricanes also are prevalent during this time of year. Any extra-tropical cyclone occurring in the study area during August-October 2023 would have major consequences on the field work planned for this project. Ten field survey days are scheduled in LIS for this project. PE field surveys will be planned by NR Program Manager Volson and will also span approximately 10 days. Field days will occur at the boat captain's discretion, but usually will take place during times of low (5-10 knots) wind and no fog or rain in the forecast.

A7. QUALITY OBJECTIVES AND CRITERIA

The quality objective of this project is to identify every eelgrass bed within the study area that has greater than 5% eelgrass cover and are larger than 0.25 acres. To achieve this goal, we will use underwater digital recordings of the benthic habitat type in combination with aerial imagery acquired specifically for the identification of shallow sub-tidal benthic habitats. We utilize a tethered underwater video camera to collect the video recordings. Underwater video coordinates (latitude longitude) will be determined by a differential GPS with a real-time accuracy of +/- 3 m. However, for navigation purposes we will use a real time differential GPS with an accuracy of +/- 1 m. During video recordings, boat speeds will be less than 2 knots to minimize drifting of the video camera behind the boat. The precision of the on-board GPS devices is derived from the satellite-based augmentation system (SBAS). SBAS are continuously operating and geo-stationary satellites that provide differential corrections 24 hours a day, 7 days a week. Thus 100% of these positions will be within the accuracies listed above.

Generally, underwater video collected with a tethered camera (as opposed to video collected by a scuba or snorkeling diver) is more time efficient over a large regional study area and safer than video collected using a diver. In addition, a recent study in Little Narragansett Bay found a favorable comparison between percent cover data collected with a tethered underwater video drone (Trident Inc.) and percent cover data collected with a diver and a GoPro video camera (August et al., 2020) (Figure 5).

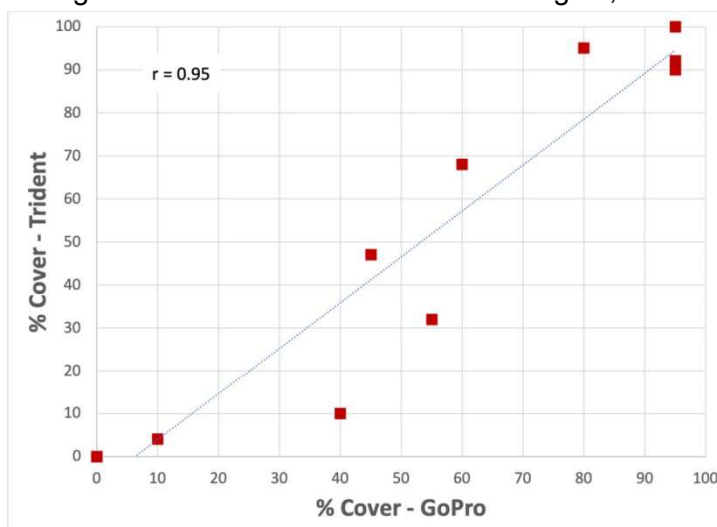
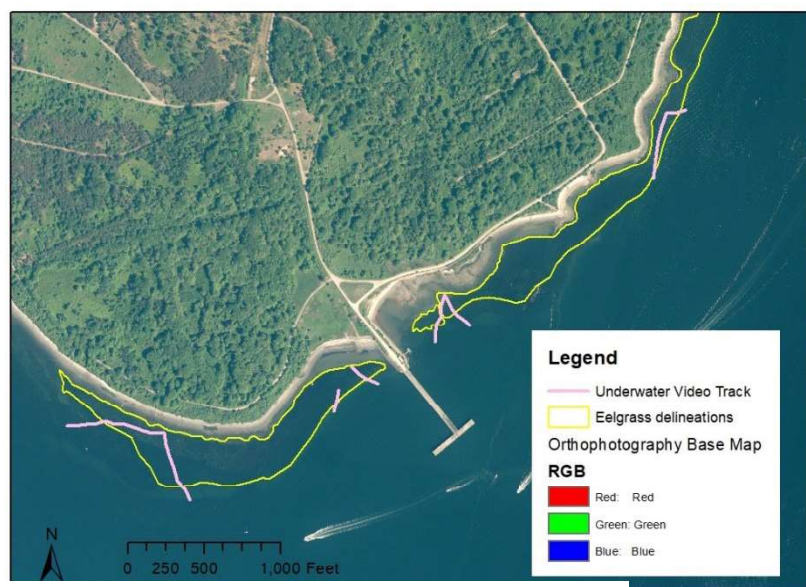


Figure 5. A regression line comparing the percent cover of eelgrass collected with an underwater video drone (Trident) and percent cover values collected from a diver with a GoPro video camera were statistically significant (from August et al., 2020).

In order to accurately quantify the size of the eelgrass bed, field surveys will focus on the edges of bed especially where water depth limits the ability of the photo interpreter to identify the benthic habitat (Figure 6). Other sources of error during the photo interpretation process includes subtle



differences in signatures of eelgrass boundaries, confusion between eelgrass and macro algae, poor water clarity, and solar glint on the surface of the water. However, to minimize other photo-interpretation errors, all delineations will be digitized by GIS Specialist M. Bradley.

Because of the variability in eelgrass signatures and the difficulty of identifying the deep-water edge of the beds, the field surveys are a critical quality assurance portion of the project. Bradley et al., 2019

Figure 6. The underwater video tracks (pink line) focus on the edges of the eelgrass bed.

found that up to 27% of the variability between the initial polygons and the final eelgrass

delineations was accounted for by the underwater video field surveys. (). Thus, we will collect underwater video for all beds ≥ 0.25 and we will collect enough video at larger beds until the deep water edge can be confidently identified.

Another objective for this project is to use the aerial extent of eelgrass (acres, hectares) for LIS and PEP to assess the yearly trends of eelgrass over time. However, accurate trends analysis using these data has been hampered by the lack of an accuracy assessment of the Tier 1 protocol. A review of the literature found that there is little (if any) assessment of the error or uncertainty involved with the Tier 1 methodology (Lyons et al., 2013; Moore and Orth, 2009). And if accuracy assessments are done, there is little consistency or standardization between the studies (Costello et al. 2011; Frederiksen et al.

For this project, we will analyze eelgrass interpretations and delineations for accuracy using a user's versus producer's accuracy matrix (Congalton, 1991). The underwater video recordings with GPS overlay will be converted to GIS (point file) by analyzing the underwater video track recordings at approximately 30 second intervals. At each 30 second interval in the video recording, the GPS location and the presence or absence of eelgrass will be recorded and converted to a GIS point-file. Before the final eelgrass delineation begins, 10% of these points will be randomly withheld and set aside. The interpreted video points (minus 10%) will then be used to create the final polygon database. After the final delineations are completed, the withheld points will be intersected with the final polygons and tabulated to create the user's versus producers' accuracy matrix (Table 1). Errors of omission or co-mission will be tabulated.

For example, an error of omission would be noted if a withheld point indicated the presence of SAV but it did not intersect with the final mapped delineations.

A8. SPECIAL TRAINING/CERTIFICATION

Since URI-EDC will not be conducting the field surveys for PE, GIS Specialist and Project Lead Bradley will coordinate and organize training and overview of the equipment and methods for PEP field staff. PEP field staff have many years of on-the-water experience and eelgrass field work, therefore the field surveys for this project between LIS (led by Bradley) and PEP will be consistent and seamless.

A9. DOCUMENTATION AND RECORDS

GIS data developed through this work will adhere to the geospatial metadata standards described by the Federal Geographic Data Committee (FGDC) (<https://www.fgdc.gov/standards>). Documentation will be provided for all produced data, including source information for each digital layer (i.e., scale and accuracy, map projection, coordinate system, etc.) and a description of the processing methods, data limitations, geographic extent, file format, date of creation, staff contact, and a description and definition of data fields and their contents.

The URI EDC will manage the digital data archival system for the project, including underwater video files, GNSS data, ArcGIS files (shapefiles and geodatabases), and Microsoft Office files such as Word, Excel, and PowerPoint. The EDC utilizes distributed technology to ensure backups of project files are efficient and secure. All project source data, intermediate, and final are stored locally on workstation SSD drives and archived on both removable mechanical SATA hard drives and 2, 4 terabyte RAID 5 network attached storage units. Nightly, differential backups of project data are done on removable SATA hard drive using FreeFileSync and an automated Windows (10) Task scheduler. Full backups of project document folders are performed weekly using BackupExecv202.0. Long-term archiving (post- project completion) will utilize the URI Information Technology (IT) storage area networks and Google Drive Cloud shares. Data will be retained throughout the course of the project and for several years following until all results are properly published and disseminated.

Table 1. An example of the user's versus producer's accuracy matrix for the 2021 Rhode Island eelgrass mapping effort. A total of 121 video locations were withheld (reference data) to identify errors during the photointerpretation and delineation process (classified data). The overall user's accuracy is **83%** (From Bradley et

Classified Data

Reference data		eelgrass	not eelgrass
	eelgrass	45	10
	not eelgrass	10	56

B. DATA GENERATION AND ACQUISITION

B1. SAMPLING PROCESS DESIGNING (EXPERIMENTAL DESIGN)

Underwater video will be collected at all beds ≥ 0.25 acres. The video will focus on the bed edges to best determine the area of the bed. Eelgrass beds larger and 0.25 acres will have multiple underwater video tracks until the bed edges can be confidently delineated. The video can be

collected at any tide stage because the shallow water edge of the bed is typically easier to identify since the aerial imagery was collected at low tide.

B2. SAMPLING METHODS

Not applicable for this project.

B3. SAMPLE HANDLING AND CUSTODY

Not applicable for this project.

B4. ANALYTICAL METHODS

Underwater video will be analyzed for presence or absence of eelgrass by GIS Specialist M. Bradley. M. Bradley will create a point file derived from the video using GIS. The point file will indicate the predominant type of benthic habitat (e.g., macro algae, eelgrass, algae /eelgrass mixture, sand, etc.). Data from past years will be compared by overlaying those data in GIS (e.g., historical imagery, delineations, and field locations). GIS Specialist M. Bradley will determine the comparable locations based on the quality of the datasets being compared. Please see Bradley and Paton, 2018 for more details.

B5. QUALITY CONTROL

Not applicable for this project.

B6. INSTRUMENT/EQUIPMENT TESTING, INSPECTION AND MAINTENANCE

For the field surveys all equipment will be fully charged the night before field work is scheduled.

B7. INSTRUMENT/EQUIPMENT CALIBRATION AND FREQUENCY

Not applicable for this project.

B8. INSPECTION/ACCEPTANCE FOR SUPPLIES AND CONSUMABLES

Not applicable for this project.

B9. NON-DIRECT MEASUREMENTS

This project will use non-direct measurements (remotely sensed) for all data collection. Benthic habitat will be assessed using underwater video linked to a mapping grade GPS device (+/- 3m). QAQC of the aerial photography will be conducted by an independent and outside contractor as part of the USGS and NYSDEC aerial photography acquisition contract.

Comparative historical imagery available for LIS include the 2012 and 2017 orthophotography. These data sets were acquired using similar specifications; thus, they will be the most comparable to the 2023 data. The 2017 orthophotography are publicly available from http://www.cteco.uconn.edu/data/flight2017_ECoast/index.htm.

B10. DATA MANAGEMENT (GEOSPATIAL)

This project's data management plan will focus to control, protect, deliver and enhance the value of geospatial data including information for use by decision makers. It leverages existing state data center infrastructure at the University of Rhode in order to access and archive data and information products that will be generated by this study.

Data Technologies and Storage: Field data for this project will be generated by recording underwater video files (mp4) stored on a USB-storage device connected to high-definition SDI DVR. After each sampling day, data from the data collector will be transferred to a USB-storage device and then copied to a computer hard-drive. These data will be converted to GIS and will

be managed using the suite of ArcGIS® (Esri, Redlands, CA) Desktop and Enterprise Server technologies.

Quality Control Plan: This project does not represent new research (Bradley and Paton, 2018). Rather it continues the eelgrass mapping efforts conducted since 2002 in LIS by USFWS and the University of Rhode Island. As such, these data have been through years of standardization and quality control measures by the project team at URI. All project data will be cross-referenced with the 2017 orthophotography to ensure spatial accuracy and consistency from the previous mapping effort.

Data sharing: All derived data and map products will be freely available and distributed through a web-based interface. Shared data will meet the standards for EPA guidelines by being approved for dissemination of the data to the public or providing an appropriate disclaimer. The primary archive and data delivery system for these data will be the existing Long Island Sound Study website (<https://longislandsoundstudy.net>) and the Peconic Estuary Partnership (<https://peconicestuary.org>) website. Web mapping applications will be hosted by the URI-EDC ArcGIS Online for Organizations site. University of Connecticut CLEAR (<https://clear.uconn.edu>) will be the host and administrator for the LIS orthophotography product and image service. Stony Brook University Geospatial Center (<https://www.stonybrook.edu/commcms/gss/index.php>) will be the host and administrator for the PEP orthophotography product and image service.

Data storage format and space

requirements: Data will be distributed as individual ArcGIS point and polygon files, Adobe Acrobat files (final report), and Microsoft Word (quarterly reports). ArcGIS shapefiles will have horizontal and vertical coordinates as-derived from the orthophotographic base map (LIS: Connecticut State Plane (m) NAD83 (2011) and PE: NY State Plane (m) Zone 3104 NAD83 (2011)).

Video files: DVR files (*.mp4) will be downloaded from the attached USB storage device used in the field at the end of

each field survey day and copied to folder (FN = date of survey) on a hard drive configured with daily back up redundancy. In order to efficiently and accurately manage the many hours of video collected for this project, conversion to GIS points and tracks will be automated using python scripts. The script works by first exporting screen shots of the video at a specified time interval (e.g., 15 seconds). Then a character image recognition tool (<https://pypi.org/project/pytesseract/>) is used to read the latitude and longitude coordinates watermarked on the individual video screen shots and outputs them to a spreadsheet (Figure 7). Each video snapshot will have a coordinate exported thus a track line can be generated from each underwater video file.



Figure 7. An example screen shot taken from an underwater video file. The python library tool *py.tesseract* interprets the lat long coordinates in upper left of the image and outputs them to a spreadsheet for use in ArcGIS.

C. ASSESSMENT AND OVERSIGHT

C1. ASSESSMENTS AND RESPONSE ACTIONS

NEIWPCC may implement, at their discretion, various audits or review of this project to assess conformance and compliance to the quality assurance project plan in accordance with the NEIWPCC Quality Management Plan.

The Project Lead will thoroughly brief project implementation staff before and after beginning their respective implementation tasks, to identify emerging/unanticipated problems and take corrective action, if necessary. Any problems or issues encountered during data collection will be reported to the Project Lead. Corrective actions or significant changes in the experiment design will be reported to the NEIWPCC QA Program Manager and the EPA Project Officer. Significant changes in experiment design will require technical and management review and approval from EPA, NYSDEC, URI, and NEIWPCC. All corrective actions will be reported in quarterly reports and notifying those on the QAPP distribution list may also be appropriate depending on the severity of the action. The progress and quality of the monthly data collection shall be assessed to ensure the objectives of this study are being accomplished. The Project Lead may implement a suspension of work and work may resume only when corrective actions are agreed upon by URI, NYSDEC, NEIWPCC, and EPA. NEIWPCC may implement, at its discretion, various audits or reviews of this project to assess conformance and compliance to the Quality Assurance Project Plan in accordance with the NEIWPCC Quality Management Plan. NEIWPCC may issue a stop work order and require corrective action(s) if nonconformance or noncompliance to the Quality Assurance Project Plan is found.

C2. REPORTS TO MANAGEMENT

Quarterly reporting for this project is due on the 10th day of the month following the quarter: 10 April (Q1); 10 July (Q2); 10 October (Q3); and 10 January (Q4). All quarterly reporting will be done by Michael Bradley at the University of Rhode Island. A project final report will also be submitted by Bradley (along with project partners) at the culmination of the project.

D. DATA VALIDATION AND USABILITY

D1. DATA REVIEW, VERIFICATION AND VALIDATION

Project partners and stakeholders will review the draft final products from this project including eelgrass delineations and final report. QAQC of the aerial photography will be done by an independent contractor as part of the USGS and NYSDEC aerial acquisition contract.

D2. VERIFICATION AND VALIDATION METHODS

Project partners and stakeholders will review the draft final products from this project including eelgrass delineations and final report. Draft eelgrass delineations will be shared with project partners. All underwater video recordings will as made available for verification and validation of eelgrass delineations.

D3. RECONCILIATION WITH USER REQUIREMENTS

Project partners and stakeholders will review the draft final products from this project including eelgrass delineations and final report.

E. REFERENCES

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F. APPENDICES