



Exxon Valdez Oil Spill Trustee Council
General Restoration, Habitat Enhancement, Habitat Protection, and Facilities Projects
Quarterly Project Reporting Form

**Detailed instructions for each section below are given in Section II. Quarterly Project Reports in the Reporting Policy on the website, <https://evostc.state.ak.us/policies-procedures/reporting-procedures/>*

Project Number: 22220507

Project Title: Port Graham Corporation General Restoration and Habitat Protection

Principal Investigator(s):

Principal Investigator -Stephen (Steve) Colligan, 3GLP, Inc dba E-Terra & Precision Flight Devices and Port Graham – E-Terra JV
 Principal in Charge-Jon Shepherd, Port Graham Corporation, President
 Project Finance- Tom Delamater, Port Graham, CFO

Reporting Periods and Due Dates:

<i>Reporting Period</i>	<i>Due Date</i>
February, March, April	June 1
May, June, July	September 1
August, September, October	December 1
November, December, January	March 1

Submission Date: FY22 Q3 December 15

Project Website: <https://www.3glp.net/evos-map/>

Please check all the boxes that apply to the current reporting period.

Project progress is on schedule.

Although project contract was not signed until late August of 2022, we proceeded to acquire equipment that had anticipated time delays in logistics and global electronic component shortages assuming a July 1 start date. Task 3 is a sub-contract to AK DF&G for subsistence study. Further details included below.

Project progress is delayed

Project Start Delays followed by weather and available resources, have caused the Delay of Field work for Mapping and Surveying; and sub-contract to ADF&G for historical subsistence study and related activities. Weather. May, June and July had incredible weather for field operations, but with the contract delays, operations have slipped into August and September where the



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region has experience one of the rainiest seasons on record. We have been actively working to re-prioritize tasks and timelines to meet the FY22 objectives.

This project has coordinated efforts with the FWS EVOS PGC-USFWS grant 22220608 Port Graham Habitat Enhancement, where it has been discovered that road access and conditions are much more challenging than anticipated, and helicopter operations are of limited availability due to weather or prior contract commitments.

Q3 updates, Road access has been made so that mapping and surveying activities can be made, but unfortunately not in time for this season. We are preparing a no-cost budget modification to allow the project to start activities at the earliest possible date next spring 2023.

AK DF&G has asked that we move the start of the subsistence study until next season. We are investigating the logistics, process and budget effects and will be coordinating with EVOS and the Department Fish and Game.

Q3 Update: Project was funded directly to ADF&G from EVOS through internal budget transfer and date modification to performance period. Final documentation forthcoming.

There are multiple activities going on in the region. The need for a consolidated web portal for field work has been determined to be necessary to facilitate field knowledge of Engineering, Habitat, Road, Bridge and Culvert replacement. Some part of the EVOS projects and along with other independent projects of Tribal Transportation intersect at many points and require coordination. See description of project task overview and details for more detailed description.

Q3 Update: Web project portal v1.0 is completed and up and running at <https://www.3gip.net/evos-map/> The project technical team is continuously collecting data from field crews and other partners to edit and add to the project web map and file storage.

Budget reallocation request.

We are preparing a no-cost budget extension into first part of FY 23 for field work and associated costs that were not possible due to late project start/approval, and unusual weather conditions.

Personnel changes.

Not at this time

1. Summary of Work Performed:

The PGC team has initiated the first draft of the project coordination web portal on Amazon Web Services, to allow project team members access and coordination to field operations and ongoing geospatial improvement to base map data.



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Below is a narrative of status and work performed under the 4 Subtask areas approved under this contract.

In short there is significant activity and conflicting schedules in work in this region. Delays in contracting have resulted in logistic challenges with weather, aerial and helicopter availability and equipment for brush cutting and road maintenance. We are coordinating closely with the EVOS PGC-USFWS grant 22220608 Port Graham Habitat Enhancement. Much of the road is impassable by vehicle. Road access to Rocky Lake and Windy Bay have at least 2 overlapping but different focusses and schedules. Fieldwork for the PGC Habitat project requires access to these areas. We collectively are addressing our separate but coordinated efforts through regular project meetings and data exchanges.

2. Abstract:

Project Task 1: Geospatial & Land Records Development

PGC started data research and coordination to assemble a composite base map that will meet national mapping standards and be usable as a primary data source for the Port Graham Corporation region and land holdings.

The first sub-task is to compile and research available data for the Region and provide a GAP Analysis of available public, private and required geospatial data to support the long term needs of PGC operations.

We have made significant progress in land title and parcel research through the Kenai Peninsula Borough, BLM and State of Alaska Division of Natural Resources. We have found errors in the KPB records and are scheduling meetings with the KPB GIS and Assessors office to develop an incremental exchange of data to update the KPB land base. Much of these inconsistencies are the details of which of the several Port Graham entities own which specific parcels or land selections that were not displayed correctly.

There is a significant amount of paper records of land transfers, ownership, and historical knowledge of the region. We have worked with the Village to secure and identify the records and develop a process for scanning and archiving the imported records. There are two sources of information relating to this project. The first being the corporate records in the village, the second are testimony from village elders from the original Exxon Valdez legal challenge. Some of these Elders are now deceased placing additional importance on preserving their views, vision and testimony. We have acquired equipment to scan and archive these records and are building out the capacity and process to secure and digitize this data. In anticipation of this subtask, we have secured additional storage area space to handle these records. The Exxon litigation records consist of more than 200 boxes of files which are currently in a contract archive facility. Releases have to be coordinated from the four entities that were part of the legal challenge. The



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local records in the village are under review to establish some procedures to digitize the records. Local leaders do not want the records leaving the village, so methods and processes are being developed to perform some or all the scanning on location. This provides a few challenges as network bandwidth and connectivity are challenging to say the least. These organization releases and planning are currently underway. We are anticipating the start of the digitization to start on October 2022.

We have started compiling a geospatial database of public records for Cadastral Survey Monuments in the area. We are working with our registered Surveyor and other project coordinators to establish locations of base stations that will be published in the national database so that all other science and engineering projects in the area will tie to these monuments. We are attempting to get at least two of these set before November to be used for next season field work along the road system.

The other main dataset that we have found deficiencies in is the hydro data. Much of the data even the latest digital elevation data for the state of Alaska is not detailed enough to show the complex road crossing, culverts, and drainage systems in the region. There is LiDAR data that was collected for parts of the area in the lower elevations for vegetation and timber mapping. We have analyzed the data and performed surface modelling to improve the over all information with good success but have identified priority areas where more detail will be required to support pending habitat and development projects. See below Anke Gleitsmann,Phd, draft description of efforts. This has helped identify areas of priority collection for later this season or first thing next spring.

We have been building out infrastructure to support operations. Computer equipment, software and IT network components have been acquired, some pre-funded before contract finalization and a large portion ordered in late August and September outlined in the contract categories. PGC pre-funded the purchase of certain technology and batteries required for field work. With national logistical delays and embedded computer chip shortages we were well served to order before the project was signed off because the availability is even more challenging, and the pricing has increased on most items since proposal was developed.

Q3 Update: Hardware and webservices have been implemented and we are progressing with the buildout of the Geospatial database for Port Graham Land Management System. We have implemented a consolidated project portal <https://www.3glp.net/evos-map/> for project related documents and links to webmap systems for project users. Significant progress has been made in evaluation of existing datasets for geospatial accuracy and suitability which will be included in Version 1 of data GAP analysis report. The team has met with Axiom the EVOS data librarian and proceeding with coordination of data and meta data.



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While we have made great progress on data, assessment, coordination with other agencies and potential cost sharing, most of the physical fieldwork budget will be postponed until next spring. We are compiling a budget of FY21 costs that will need to be rolled into FY23 for field work and support.

Project Task 2: Power and Communication Support

Remote Communications and Power at remote locations are critical for field support for the next 5 years. PGC has solicited updated request quotes for equipment, Anticipating this equipment to be acquired in Q3 or early Q4 of the FY22 project year.

Q3 Update: Engineering Design for equipment and specifications complete, some equipment has been acquired and it is anticipated to be completed by end of Q4.

Project Task 3: ADF&G Historical Subsistence Study

Since the signing of the contract for this project, we have been in contact with ADF&G Substance Division, to update timeline and expectation on this task. We will be following up with EVOS, ADF&G to determine how this task and funds flow back to the department to perform work identified in this task. ADF&G has already indicated that they may want to delay this until the beginning of FY23. We will continue to facilitate this discussion and update in our next report.

Q3 Update: EVOS and ADF&G have initiated a direct budget transfer and schedule change with ADF&G subsistence division. Details forthcoming of final scope and schedule.

Project Task 4: Language and historical preservation research

We have been in communications with Paluwik Heritage Foundation, the Port Graham non-profit. Much of this work is in the village in support of records research, Elder testimony of subsistence and other critical records contained in Exxon legal files. They will also assist in the coordination and facilitation for ADF&G in the village.

Q3 Update: Document scanning and archiving has started, equipment acquired and initial training has been performed. It is anticipated that part of this project will move towards a FY23 no-cost budget increase to coincide with the ADF&G budget modifications.

3. Coordination and Collaboration:

As stated previously, we have been communicating with other projects in the region but have also ramped up our participation in the Statewide working groups for geospatial coastal and vegetation mapping. Our primary efforts at this point are to create a common platform of communications and data sharing for road, bridge, culvert and fish habitat studies.



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We have met with US Fish and Wildlife staff, road and infrastructure engineering firm RPK Engineering for the village and determined that we would take the lead on creating a web portal for these projects to coordinate field activities. Each project is in the field for different reasons and focus. I.e: when USFWS identifies a bridge as in good shape for appearance, the engineering firm has identified it as having significant structural problems underneath and has prioritized it for replacement. All photos, video and data are being authored so that all parties can have updated information and have mutual benefit of fieldwork.

4. Response to EVOSTC Review, Recommendations and Comments:

5. Budget: Cumulative Spending & Budget Q1, Q2& Q3 Feb 1 -Oct 31 2022

Budget Category:	Proposed FY 22	Proposed FY 23	Proposed FY 24	Proposed FY 25	Proposed FY 26	5-YR TOTAL PROPOSED	ACTUAL CUMULATIVE
Personnel	\$ 874,452.00	\$ 741,204.00	\$ 741,204.00	\$ 741,204.00	\$ 741,204.00	\$ 3,839,268.00	\$ 613,719.50
Travel	\$ 37,332.00	\$ 36,476.00	\$ 36,236.00	\$ 20,904.00	\$ 17,832.00	\$ 148,780.00	\$ 691.60
Contractual	\$ 725,000.00	\$ 475,000.00	\$ -	\$ 150,000.00	\$ 75,000.00	\$ 1,425,000.00	\$ 2,000.00
Commodities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Equipment	\$ 698,400.00	\$ 35,000.00	\$ 25,000.00	\$ 35,000.00	\$ 25,000.00	\$ 818,400.00	\$ 399,842.64
Indirect Costs (6%)	\$ 98,207.04	\$ 75,160.80	\$ 46,646.40	\$ 54,726.48	\$ 50,042.16	\$ 324,782.88	\$ 60,975.22
SUBTOTAL	\$ 2,433,391.04	\$ 1,362,840.80	\$ 849,086.40	\$ 1,001,834.48	\$ 909,078.16	\$ 6,556,230.88	\$ 1,077,228.96
General Administration (9% of sub)	\$ 219,005.19	\$ 122,655.67	\$ 76,417.78	\$ 90,165.10	\$ 81,817.03	\$ 590,060.78	\$ -
PROJECT TOTAL	\$2,652,396.23	\$1,485,496.47	\$925,504.18	\$1,091,999.58	\$990,895.19	\$7,146,291.66	\$1,077,228.96



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**Description of 4 Sub-Task Areas defined and funded in Port Graham Habitat Project
22220507**

Project Task 1: Geospatial & Land Records Development

This project is to create a comprehensive and publicly available geospatial data and land records system that meet national mapping standards for PGC lands impacted by the Spill. This essential baseline set of data, does not currently exist and is critical to the successful restoration of injured resources and services on these lands. Updated and standardized geospatial information will further the mission of EVOSTC by enabling PGC as well as other organizations/agencies and user groups to accurately plan and implement effective restoration and enhancement activities in this region.

PCG and Partner E-Terra will conduct a data Needs-Analysis and GAP Analysis of data to prioritize Geospatial and land records needs. While there is a great need for accurate coastal and land information in the Port Graham region, there are also many existing scientific studies and public data projects underway. PGC professional staff will coordinate with existing agencies to inventory specific activities in the Port Graham region. PCG staff will then define specific data collections and geospatial data required to support a PGC Land Information System and prioritize activities based on existing funding.

PCG and E-Terra will also create a spatial database of Cadastral Survey Control for the area. We will analyze existing control monuments and determine which control monuments will be used for this project or set new monumentation within the Port Graham region. All new monumentation will be set by a Alaska Registered Surveyor and published to be part of the Administration's National Geodetic Survey (NGS) to improve the National Spatial Reference System (NSRS) as well as the EVOS data systems. All existing and future data will be tied to these reference monuments.

Compiled, and collected data shall be input into a common GeoSpatial Platform and viewer for Land and Resource Management. PCG staff and E-Terra will development maintain this system and data through out this project and be self sustaining after this grant is complete. All data collected will also be published and updated to the EVOS data repository working with EVOS contractor AXIOM.

Deliverables:

- Geospatial Data analysis report version 1.0
- Geodetic Control Report and Scope for creation
- Creation of Geospatial Framework for PCG land Records
- Creation of incremental geospatial data and meta data for PGC lands.



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Transition:

This is a 5 year project, each year will conclude with a status report, compilation of data collected in the previous year and plan for next years funding or transition for PGC to sustain portions of the content and maintenance by self-performance and use a a land management tool. Total cost breakdown provided on EVOS Budget Proposal Report. Summary FY22-FY26 page 1 of 32, FY22 details on pages 2-4 of 32 for labor, contract and equipment.

Project Task 2: Power and Communication Support

This project will improve existing remote facilities on PGC lands to direct human use away from critical habitats within areas impacted by the Spill. PGC currently owns three camp facilities, two of which are inside the boundaries of the KFNP, that are capable of providing lodging and workspace for research, monitoring and restoration activities. These well-established cabins will be available to PGC partners and others working in the spill damaged area. Use of these facilities will reduce disturbances to sensitive habitat thus aiding in the restoration of ecosystems damaged by the Spill. These facilities are the base camps for mapping and surveying tasks as well as other project by PGC and other agencies. Portions of this task were reduced by the board to eliminate Expenses to improve the cabins or maintain structures, but what remains are equipment for power and communications to support field work and data collection over the next 5 years.

Deliverables:

Purchase of Equipment for Power and Communications
Installation of equipment at the 3 locations

Transition: This is a 1 year project, putting equipment in place to support 5 years' worth of field work or longer. Equipment will be acquired and installed in 2022. EVOS Budget Line Items Page 4 of 32 Equipment Detail SatCOM System, Weather Station, Battery Plant, PV Array, DC to DC Inverter, Electrical Distribution and Generator Set.

Project Task 3: ADF&G Historical Subsistence Study

This task is to complete an original subsistence study by ADF&G that was previously started but not completed due to lack of funding at DF&G. This project managed by PGC is to work with ADF&G to Collect, analyze, and report information about current subsistence uses of fish and wildlife in PGC region. Most of this work will be contracted to ADF&G with defined reports, deliverables and time schedule for completion of research and delivery of final findings. It is understood that most of this data is confidential in nature and PGC technical staff will work with EVOS DATA Management staff to determine access based on ADF&G and EVOS Policies.



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Port Graham will facilitate ADF&G and Paluwik Heritage Foundation resources comparing new data and comparing it with previous research results, that can be applied to evaluate the status of subsistence uses in light of the EVOS TC recovery objective. Subsistence uses are a vital natural resource service that was injured by the Spill. In the last update to subsistence harvests in this area (Fall 2014) subsistence use are identified as “recovering” but not fully recovered. These products will better enable PGC to safeguard areas critical to their people.

Deliverables:

Contract and Scope with ADF&G
Provide Supplemental data and PGC input to ADF&G
Creation of Report/Study by ADF&G

This is a 2 year project included in the 2022 and 2023 project budget to ADF&G. PGC will work with ADF&G to develop a incremental deliverable in 2022 and a transition plan should 2023 funding not be available. EVOS Project Budget Page 3 of 32 and page 6 of 32 “ADF&G Follow-on Subsistence Study- Port Graham /Nanwalek”

Project Task 4: Language and historical preservation research

Work with Paluwik Heritage Foundation to further develop to historical language, culture and substance activities in the Port Graham region. PGC and Paluwik Heritage Foundation will support the ADF&G project of Historical Subsistence Study. There are over 200 bankers’ boxes of legal files and testimony of village elders regarding the Exxon Valdez Oil Spill and resulting legal papers. Within these fails are testimony from village Elders many now deceased about history, culture and subsistence activities before the oil spill. These records will be analyzed and digitally archived to preserve the information and as input into the ADF&G study.

Deliverables:

Report of activities and records electronically preserved.

Transition:

This is a 2 year project starting in late 2022 with the majority of the work happening in 2023. PGC will work with Paluwik Heritage Foundation to define scope and deliverables to be completed with FY22 budget and plan for FY23 budget as a continuation. Proposed Budget Page 3 of 32 and page 6 of 32 Contract for Subsistence Language Studies



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Anke Gleitsmann, Phd, Preliminary results of Hydro Study Port Graham Village to Rocky Lake.

Looking at streams crossing the main Port Graham - Windy Bay - Rocky Lake road (road in red, with verified stream crossings marked - data set of stream crossings is incomplete).

The NHD Flowline data includes old, generalized coastline and larger stream linear features. NHR error marked yellow - stream going uphill from pond to road.

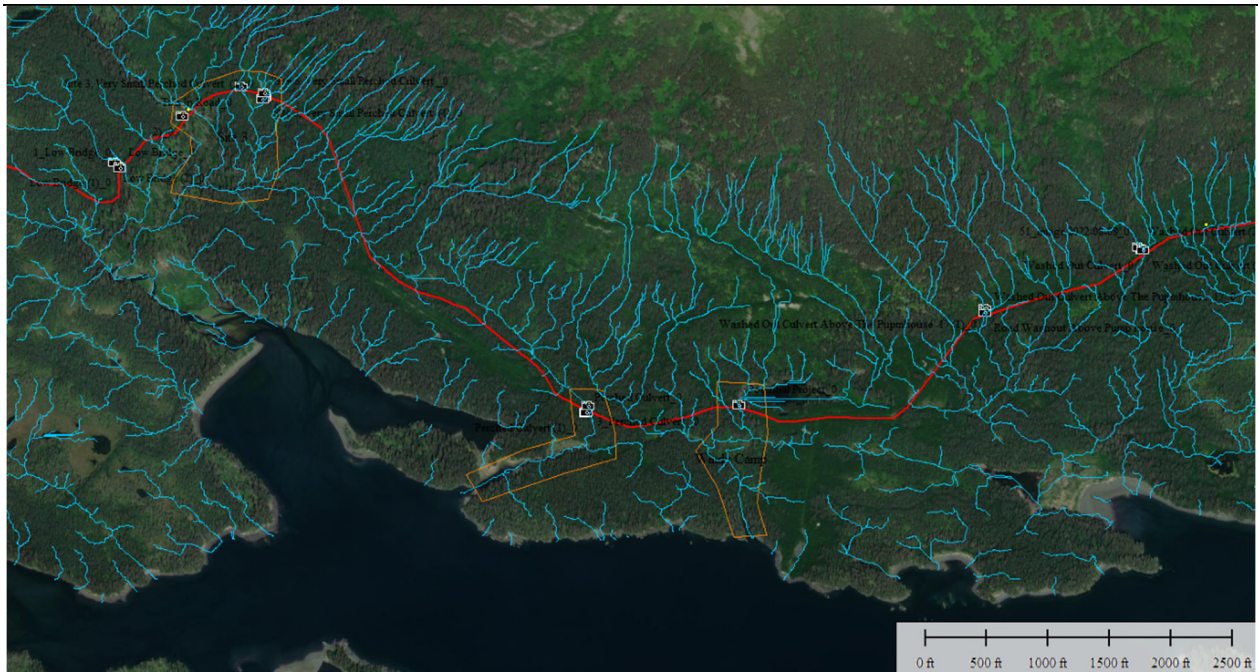


Drainage network based on 2016 Chugachmiut Lidar data (1 m bare earth DEM) - much more detailed, but needs verification which lines are actual streams etc. Limited coverage, only lower elevations.

Helpful for establishing probable courses of streams for potential high resolution UAV Lidar data collection AOIs (orange polygons) looking at stream crossings and downstream obstructions.



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The 5 m Ifsar DEM can also be used to derive drainage lines beyond the NHD but is much less detailed compared to the Lidar based drainage network and contains many large errors:



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