



REQUEST FOR PROPOSAL (RFP)

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION
DEPARTMENT OF NATURAL RESOURCES - FISHERIES PROGRAM

**2026 Tucannon River Basin
Terrestrial NIR LiDAR, Topo-bathymetric LiDAR, 4-Band Orthophotography
Acquisition, Post-processing and Data Analysis**

RFP No: 2026-08/452-026

Date Issued: 10/6/2026

Technical Contact: Kris Fischer (krisfischer@ctuir.org)
(541) 429-7547 (Office & Fax)

Administrative Contact: Julie A. Burke (julieburke@ctuir.org)
541-429-7292 (Office & Fax)

Critical Dates:

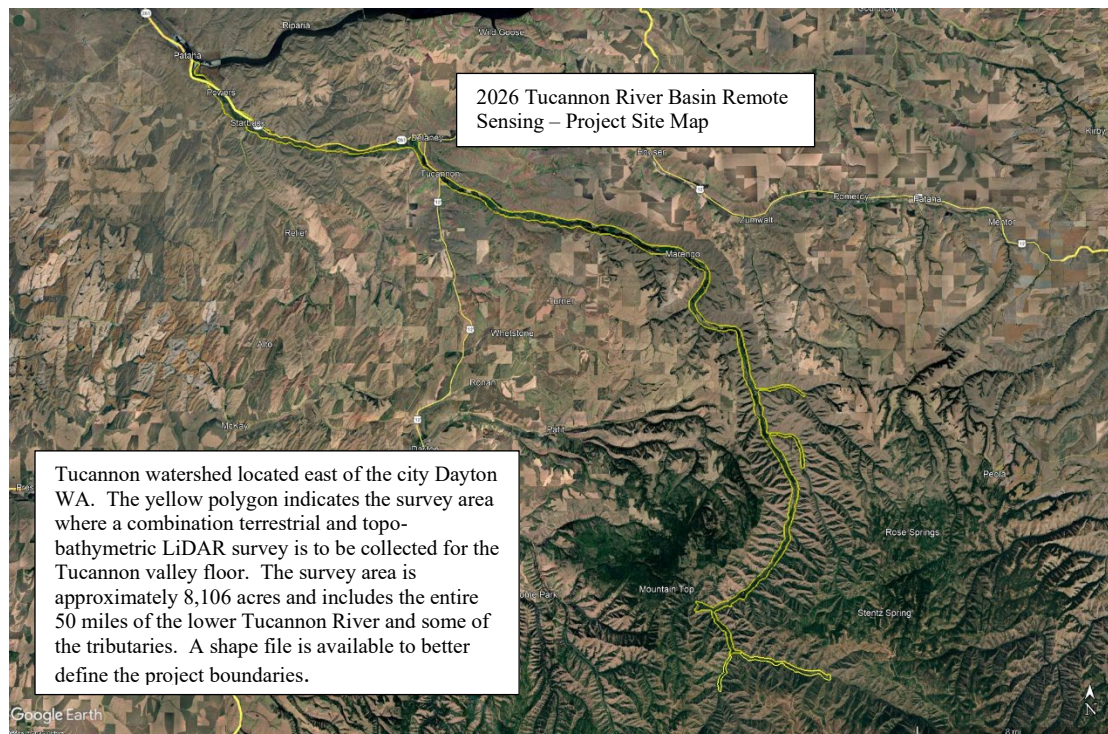
Request for Clarification Deadline:	October 12, 2026 – COB
Response to Clarification Deadline:	October 15, 2026 - COB
Proposal Submission Deadline:	October 22, 2026 – 2:00 pm PST
Tentative Award Selection (est.):	October 29, 2026
Contract Award (est.):	November 5, 2026
Project Initiation:	November 10, 2026
Data QA/QC:	January 10, 2027
Project Completion:	October 30, 2027

Part I – General Information and RFP Process

2026 Tucannon River Basin Terrestrial NIR LiDAR, Topo-bathymetric LiDAR, 4-Band Orthophotography Acquisition, Post-processing and Data Analysis

1.1 *Project Purpose and Location*

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resource is requesting proposals for both airborne LiDAR data acquisition and for additional LiDAR data analysis. CTUIR is requesting proposals to (1) acquire airborne orthophotography, terrestrial and topo-bathymetric LiDAR mapping data and perform post processing, and (2) data analysis may include updating topographic maps, hydrologic modeling, development of habitat restoration projects, geomorphic change detection, floodplain connectivity and river complexity analysis in the Tucannon River, located near the town of Dayton, WA in southeastern Washington State. The project area is located on the mainstem Tucannon River (approx. 50 miles) and will include the lower extents of the primary tributaries. Three prior LiDAR data acquisitions have occurred in the Tucannon watershed in 2010, 2017 and the third in 2020. The area to be surveyed will be dependent on acquisition costs, but the current target is approximately 8,106 acres within the Tucannon River valley bottom.



This Request for Proposals ("RFP") provides the specific services to be contracted as well as due dates, information concerning the preparation and submittal of Proposals, an explanation of how Proposals will be evaluated, and terms and conditions of the contract that may be awarded as a result of the RFP.

Contractors are not required to submit proposals for both the data acquisition and data analysis. CTUIR will score and rank the data acquisition and data analysis separately, and if necessary award separate contracts for each proposal separately.

1.2 Project Timeline:

Project data collection is planned to begin as close to **November 10, 2026** as possible. Post survey data QAQC and analysis will be completed within 60-90 days of the data collection.

1.3 Proposal Submission Deadline

The closing date for submissions will be on **October 22, 2026 at 2:00 pm.**, Pacific Standard Time (PST). Proposals received after the specified time will not be considered. Contractors must submit their proposal electronically to: julieburke@ctuir.org. Proposals must be in Adobe PDF format

Subject line should read: **"Proposal for 2026 Tucannon River LiDAR Data Collection"**

1.4 In Writing

Bids must be prepared by computer. No oral, handwritten, telephone, e-mail, or facsimile Proposals will be accepted.

1.5 Necessary Information

Proposals must contain all information requested in the RFP. The CTUIR will not consider additional information submitted after the Closing Date and may reject incomplete proposals.

1.6 Cost of Proposals

The CTUIR shall not be liable for any expenses incurred by Contractors in either preparing or submitting Proposals, evaluation/selection, or contract negotiation process, if any.

1.7 Request for Clarification

Contractors may submit a written request for clarification via email by **October 12, 2026**. The CTUIR will not consider any requests submitted after the time period specified above. Questions regarding the RFP or request for clarification shall be sent to the RFP contact listed in Part 1.3.

1.8 *Response to Requests for Clarification*

Responses to questions will be provided no later than **October 15, 2026**.

1.9 *Proposals Constitute Firm Offers*

Submission of a Proposal constitutes Contractor's affirmation that all terms and conditions of the Proposal constitute a binding offer that shall remain firm for a period of ninety (90) days from the Closing Date.

1.10 *Signature Required; Proposer Affirmations*

An authorized representative of the Contractor must sign the original Proposal in ink. Contractor's signature and submission of a signed Proposal in response to the RFP constitute Contractor's affirmation that the Contractor agrees to be bound by the terms and conditions of the RFP and by all terms and conditions of the Contract awarded.

1.11 *Type of Contract*

The CTUIR shall execute a Subcontract for Technical Services.

1.12 *Confidential Information*

Proposals are confidential until the evaluation and selection process has been completed and the CTUIR has issued a notice of tentative award. Any information a Contractor submits in response to the RFP that the Contractor considers a trade secret or confidential proprietary information, and Contractor wishes to protect from public disclosure, must be clearly labeled with the following:

"This information constitutes a trade secret or confidential proprietary information and is not to be disclosed except in accordance with applicable public disclosure laws."

1.13 *Requests for Further Clarification of Proposals*

The CTUIR may request additional clarification from Contractors on any portion of the Proposal prior to awarding the contract.

1.14 *Cancellation of RFP*

The CTUIR may cancel this RFP at any time upon finding that it is in the CTUIR's best interest to do so.

1.15 *Rejection of Proposals*

The CTUIR may reject a particular Proposal or all Proposals upon finding that it is in the CTUIR's best interest to do so.

1.16 Tentative Award and Contract Negotiations

The CTUIR will provide a written tentative award notice to the responsible Contractor whose proposal is deemed to be most advantageous and of best value towards meeting the project objectives. The CTUIR will enter into negotiations with the Contractor on the following contract terms: (a) Contract tasks; (b) Staffing; (c) Performance Schedule; and (d) A maximum, not to exceed Contract price, which is consistent with the Quote and fair and reasonable to the CTUIR, taking into account the estimated value, scope, complexity, and nature of the services to be provided. The CTUIR may also negotiate the statement of work and, at its discretion, add to the scope of services based on a Contractor's recommendations (but still within the scope of this RFP) or reduce the scope of services.

Final award will be contingent upon successful negotiation of a contract within 4 days after the tentative award.

The CTUIR may terminate negotiations with the Contractor if they fail to result in a contract within a reasonable time. The CTUIR will then enter into negotiations with the second responsible Contractor, and if necessary the third responsible Contractor. If the second or third round of negotiations fails to result in a contract, the CTUIR may formally terminate the solicitation.

1.17 Protest of Tentative Award Selection

A notification of tentative award to the highest-ranked Contractor will be mailed to all Contractors that submitted a Proposal in response to this RFP. A Contractor who claims to have been adversely affected by the selection of a competing Contractor shall have seven (7) calendar days after receiving the notice of selection to submit a written protest of the selection to the RFP contact listed in Part 1.3. The CTUIR will not consider protests submitted after the date established in this Part. The protest must specify the grounds upon which the Protest is based.

1.18 Award

After expiration of the seven (7)-calendar day selection protest period and resolution of all protests, the CTUIR will proceed with final award.

1.19 Investigation of References

The CTUIR reserves the right to investigate the references and past performance of any Contractor with respect to its successful performance of similar services, compliance with RFP and contractual obligations, and its lawful payment of suppliers, sub-contractors, and employees. The CTUIR may postpone award or execution of the contract after the announcement of the apparent successful Contractor in order to complete its investigation. The CTUIR reserves the right to reject any proposal at any time prior to the execution of any resulting contract.

1.20 Amendments

The CTUIR reserves the right to amend the resulting Contract from this RFP. Amendments could include but are not limited to, changes in the statement of work, extension of time and consideration changes for the Contractor. All amendments shall be in writing and signed by all approving parties before becoming effective. Only the CTUIR has the final authority to execute changes, notices or amendments to Contract.

1.21 Tour of Site

A site tour is not planned for this project. Questions regarding project area should be directed toward the technical contact before the request for clarification date listed in Section 1.8 and questions will be answered during the clarification response described in Section 1.9.

PART II – SERVICES TO BE PROVIDED

2.1 **Scope of Work**

This RFP is to acquire an airborne LiDAR data set including terrestrial and topobathymetric layers and 4-band orthophotography data in the Tucannon River and tributaries (See Attachment A). The data will be used for a variety of purposes including updating topographic maps, hydrologic modeling, habitat change detection in relation to riparian, floodplain and stream channel shape and the development of existing condition and future project development. The size of the area to be surveyed is dependent on acquisition costs but is approximately 8,106 acres. The data is to be acquired no later than December 10, 2026 to take advantage of leaf-off and pre-snow conditions. If necessary, because of sun angle conditions, the orthophotography collection may take place later. Land cover in the mapping area varies from densely forested, to agricultural and the topography varies from valley bottoms to steep and rugged sloped valley walls. The forest cover includes mixed deciduous and conifer stands as well as pure conifer stands.

Land cover in the Tucannon River mapping area varies from agricultural to densely forested, and the topography varies from flat lying to rugged steeply sloped valley walls. The forest cover within the basin includes both mixed deciduous and conifer stands and pure conifer stands. Data products are to include digital elevation models (DEMs) of the 'bare earth' ground surface, first and second return layers showing the upper-most surface defined by vegetation cover, buildings, and other structures. The required data acquisition time period will follow leaf-off, which is generally the last week of October through the third week of November before the first snow cover.

The proposed 2026 LiDAR data acquisition will replicate the 2010, 2017 and 2020 acquisition effort to assist with the LiDAR data analysis which will include geomorphic change detection and updating existing geomorphic information following a ~50-year flood flow event which occurred in March 2026. The 2026 LiDAR acquisition includes topographic LiDAR, bathymetric LiDAR, orthophotographic data and post processing for ~50 miles of the main-stem Tucannon and approximately 18 miles of tributaries. A team of Tucannon restoration partners will be providing input throughout the data acquisition process including providing on-site condition and scheduling assistance, data acquisition and data analysis. This team will consist of staff from CTUIR and include other Tucannon Basin restoration partners.

Project goal:

The project goal is to replicate the 2010, 2017 and 2020 Tucannon River LiDAR data acquisition and post processing effort to allow for geomorphic change analysis following the spring high water event in March 2026. The data acquisition effort will be used to make direct comparisons to pre/post habitat restoration projects completed to date, provide new information in the development of proposed future work, and provide needed information for future adaptive management.

Project objectives:

LiDAR Data Acquisition:

- Collect a combination of terrestrial LiDAR @ >8 pulses/ m^2 for Terrestrial & > 6 pulses/ m^2 for topo-bathymetric LiDAR
- Collect 4 band RGBir Orthophotography;
- Collect site appropriate survey control for both the terrestrial and bathymetric LiDAR, the number of control points per mile of survey should be clearly stated in the proposal.
- Post data collection QA/QC;
- Develop surface models including bare earth DEM, highest hit DEM, first returns DEM, Intensity images, combined (topo-bathymetry and surface model DEM)
- Develop GIS based geo-database containing DEM, relative elevation, wetted width, and 1- and 5-year flood elevations.
- Provide data collection report and presentation ready graphics
- Give presentation of final product to local groups working in the Tucannon Basin.

Data Analysis:

- Compare the 2010, 2017, 2020 and 2026 LiDAR products, assess accuracy and precision of the 4 data sets
- Looking for novel ways to look at geomorphic and habitat specific changes from the 2017, 2020 and 2026 green lidar to see how the river has changed from the 25-year and 50-year events in response to implemented habitat projects within the Tucannon Basin. The list below are suggestions for analysis that may be appropriate but are not intended to be an exhaustive list. Other analysis may be better or more appropriate for this work. Contractor's should list analysis types and associated costs for each analysis being suggested for this work.
- Perform geomorphic change detection, to show changes to the Tucannon River from the habitat restoration work and the 2026 flood event
- Perform an update to the existing Tucannon River HEC-RAS model to allow for determination of 5-year, 10-year, and 25-year flood event calculations
- Complete a floodplain connectivity analysis as completed in the 2020 Tucannon River Geomorphic Update (AnchorQEA, Inc 2020)
- Complete the habitat complexity analysis as completed in the 2020 Tucannon River Geomorphic Update (AnchorQEA, Inc 2020)
- Provide data collection report and presentation ready graphics
- Give presentation of final product to local groups working in the Tucannon Basin.

2.2 Project Specifications

LiDAR Data Acquisition:

Proposals should include a clear strategy to implement data collection, including a combination of both terrestrial and topo-bathymetric LiDAR for the terrestrial and aquatic surfaces identified within the project boundary (see attachment A). It is desired that a standard high-resolution sensor be utilized to capture ≥ 8 pulse/ m^2 for terrestrial and ≥ 6 pulse/ m^2 for bathymetric data. The proposal should clearly identify solutions that integrate the existing LiDAR data with the newly collected LiDAR. This should include

innovative ways to update the existing digital elevation models, the orthophotography, (collected in 2010, 2017 and 2020 for the update to the 2020 Tucannon Geomorphic Assessment (Anchor QEA 2020)), and topo-bathymetric digital elevation models in a geodatabase for the Tucannon River main stem and its tributaries.

Proposals should clearly explain the methodology your firm proposes to use to achieve the required results and should be clearly described (using tables and figures) within the proposal. Proposals must include all aspects of survey control, data acquisition and analysis, and Quality Control procedures used to collect the data. Describe the attributes of the data as it is to be acquired, including: laser pulse repetition rate; scan pattern, angle and rate; laser footprint diameter on the ground; number of returns per shot collected (i.e., first and last, or multiple); laser swath width, overlap between adjacent laser swaths, average and worst-case spacing of laser shots cross and along-track within a swath; number of GPS base stations used for accuracy and maximum distance from a station allowed. All proposals should state an estimate of the Root Mean Square Error (RMSE) for the project in terms of accuracy for the topographic data.

For first and last, or multiple returns per shot, state the minimum resolvable distance between returns. States if the amplitude of the laser return and scan angle are to be included as a part of the delivered data. List the software used to process the data, include the company name, version used and platform/operating system. One post project deliverable the Programmatic would like to see is a GIS based database illustrating the DEMs, a relative elevation model and a combined DEM of the bathymetric and terrestrial layers. If these newly collected layers can be overlaid on top of the existing 2010, 2017 and 2020 layers in the geodatabase it would be highly advantageous to our user groups.

LiDAR Data Analysis:

We are looking for innovative ways to analyze and compare the newly collected topobathymetric LiDAR data. While we have included elements of this data analysis, this is in no way an exhaustive list (included in the above scope of work). The proposals should list familiar data analysis techniques and include line-item costs for each analysis to help the selection committee rank and review the proposals. If there are other innovative ways (not listed above) to analysis the comparison data between the 3 years of red/green LiDAR data to help with our habitat project adaptive management needs, please include them into the proposal as added analysis and provide costs for each additional analysis to help the ranking committee decide which proposals best meet the needs of the work. As mentioned above we are really interested in comparisons between the 2017, 2020 and the newly collected 2026 topobathymetric data, analysis showing geomorphic and habitat changes after an approximately 50-year event in the spring of 2026. We hope to use this data analysis in future adaptive management analysis decision making, as well as using the presentation quality graphics to help inform federal, state and private landowners how the habitat restoration work is performing to date, with an emphasis on progress towards limiting factors for both adult and juvenile salmon in the Tucannon system.

2.3 Required Equipment Standards:

- A. NIR LiDAR sensor that is 8-bit intensity and a resolution of ≥ 8 pulses/m².
- B. Bathymetric LiDAR sensor that is 16-bit intensity and a resolution of ≥ 6 pulses/m².
- C. 4 –Band Orthophotography that is large image format digital camera in 4 bands (R,G,B, and NIR).

2.4 Minimum Equipment Specifications:

Proposed equipment should be sufficient to meet the minimum equipment requirements to complete the necessary work.

2.5 Materials and Services Furnished by the Contractor:

The Contractor must supply all equipment and experienced operators necessary to complete the work specified in the contract. In addition, the contractor must furnish and cover:

1. All costs of equipment, operation, and transportation.
2. An experienced, qualified supervisor for crew.
3. All required safety equipment and training for crew members in use of tools.
4. Designated representative to supervise contract operations and represent Contractor.
5. All materials and equipment for BMP implementation.

2.6 Regulations and Permits

The contractor will, without additional expense to the CTUIR, be responsible for complying with any Federal and State Laws, Codes, and Regulations applicable to the performance of the work.

2.7 Contractor Liability, Licensing, and Insurance Requirements:

The contractor will be held responsible for all damages to persons or property that occur as a result of the contractors' fault of negligence and shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others. The CTUIR will be responsible for providing liability and workers compensation insurance for its employees when they are on the work site.

Contractors must hold liability insurance with the following limits: \$2,000,000 aggregate, and \$1,000,000 per occurrence. Liability insurance must name the CTUIR as an additional insured party for the duration of the project. Contractor must provide Commercial Automobile Liability Insurance in amount equal to the greater of (1) one million dollars for all vehicles used in performance of the services or (2) any other amount required by applicable law. Contractor must also provide a certificate of workman comp insurance (if contractor has employees).

2.8 Bid Itemization

Bid will include itemized costs per bid item component by quantities and unit cost including materials, proposed equipment, equipment hourly rate, operator hourly rate, and personnel hourly rates. Contractor will provide a lump sum price per bid item and total aggregate bid.

2.9 Team Competencies

The following are expected minimum consultant team competencies. One person might fill more than one role, and it is expected that proposals will include additional competencies as required.

- Project Manager
- GIS Manager
- Data Analyst
- Database Administrator

2.10 Timeline and Deliverables

The following are expected minimum deliverables and a proposed partial timeline. Final deliverables and timeline will be negotiated in the contracting process, and proposals that present creativity, efficiency, and/or novel approaches are strongly encouraged. Communication is highly encouraged throughout the data collection process.

- a. The scheduled date for completion of the Project (Data Acquisition in 2026 and Data Analysis thru March of 2027) is **October 30, 2027**. The data will need to be acquired in a relatively short work window, this window should be no earlier than November 1, 2026 and no later than December 10, 2026, with the goal of collecting data right after leaf-off and before snow has fallen on the floodplain. The Contractor must complete all aspects of the work on, or before this completion date, unless completion is delayed due to conditions mutually agreed upon and designated in writing by the Contractor and the CTUIR.
- b. Once work commences, project work shall be ongoing. Work shall commence on a Monday-Friday schedule unless prior arrangements are made with the CTUIR. Any delay in daily production will be discussed and agreed upon through CTUIR.
- c. Work shall not commence until the work schedule is approved, then shall be continuous, unless weather conditions or circumstances beyond Contractor's control prevent working. The CTUIR must approve deviation from the approved work schedule in writing.
- d. Minimum deliverables for LiDAR should include point cloud with all returns, surface models (bare earth DEM, 1m resolution, ESRI Grid Format; highest hit DEM, 1m resolution, ESRI Grid Format; intensity images, 1/2m resolution, GeoTiff Format), Vectors (survey boundary, shapefile format and tile delineation, shapefile format).

- e. Minimum deliverables for topo-bathymetric LiDAR should include: point cloud with all returns, surface models (combined (topo-bathymetry) surface model (DEM), 1m resolution, ESRI Grid format, highest hit model (DEM), 1m resolution, ESRI Grid format, and intensity images, 1/2m resolution, GeoTIFF format) and Vectors (survey boundary, (shapefile format), tile delineation, (shapefile format), water's edge (shapefile format) and submerged topography density (shapefile format).
- f. If the contractor is bidding on the data analysis proposal, (geomorphic change detection element), there should be thorough description of how this would be accomplished and how the data is intended to be used, including examples how this has been completed with similar projects. Minimum deliverables should be a final report, including any datasets or data files and be similar to those in sections d and e above. Remember, please provide a cost per analysis to help inform the selection committee.
- g. Final reporting should include methods, results, accuracy assessment and FGDC compliant metadata.
- h. Give project presentation to local technical groups in the Tucannon Basin.

2.11 Payment

The Contractor can invoice on a monthly basis during the project period or on the basis of completion of project tasks. Contractor shall coordinate closely with CTUIR representative during development, review, and submittal of project construction invoices to ensure consistency and timely approval and processing of invoices. The CTUIR will make payment within 30-days of receipt of an invoice following approval from CTUIR rep.

PART III – PROPOSAL REQUIREMENTS

For this RFP, each interested Contractor will submit a proposal package to the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources, Fisheries Program that includes the following sections and tabbed with the following headings.

1. COVER LETTER

A cover letter must express the Contractor's interest in the project and commitment to the obligations expressed in the RFP. This letter should include the original signature of an authorized representative of the Contractor and indicate that the Contractor accepts all of the terms and conditions contained in the RFP.

2. FIRM SUMMARY

The Contractor will provide general information regarding their particular firm. This should include information about the company size, location, contracting experience within the region, areas of expertise and types of services, staff longevity, staff capabilities and training, and experience with natural resource restoration work and associated construction.

3. ORGANIZATION STRUCTURE

Identify the individuals responsible for managing each project, conducting specific project tasks, and their experience conducting those tasks for your firm. The Contractor should also include an organizational chart showing lines of communication and decision-making hierarchy as well as any sub-contractors. If a team of individuals from multiple contracting firms are assembled, adequately describe the role of each team member.

4. FIRM QUALIFICATIONS AND EXPERIENCE

The proposal will list the qualifications and relevant project development experience of the Contractor and each team member in relationship to completing projects of similar nature and size.

Please identify a minimum of three LiDAR acquisition and/or data analysis projects that are similar to the proposed projects which have been successfully completed within the last five years. Provide a brief description of each project, including the complexity of the project, size and dollar amount of project, completion date of project, and references for each of the projects. Reference information shall include the name and phone number of owner's representatives for the particular projects.

5. PROPOSED APPROACH OF SCOPE OF WORK

Describe the approach the Contractor proposes to complete the project as defined in the RFP and specifications. The contractor should provide enough detail in the proposed approach to fully articulate the Contractors understanding of the scope and complexities of the project. Describe

the method and approach the consultant proposes in order to complete the tasks outlined above in the data acquisition and data analysis proposals. This section should include a description of the steps used to collect necessary data and information and the analysis and summary that will be completed.

6. PROJECT SCHEDULE AND ITEMIZED COST

Provide a detailed schedule describing all significant work tasks, how the individual tasks will be completed, the sequence in which they are to be performed, and the workers and equipment to be assigned, as well as a schedule for the overall project. Provide evidence that adequate management effort, support staff, technical compliance, and resources will be committed to the timely completion of the project. We will assess the realism of proposed completion dates, given the resources to be devoted to the work.

Your proposals should specifically address the following:

- Proposed starting and completion dates;
- Type and size of all equipment to be used, including any electronic data collection devices, and any other equipment to be used on site;
- Project managers, operators and workers and their duties;
- Describe the order you plan on completing the work outlined in the contract, and,
- A contingency plan if the contract time runs short.

Provide a lump sum line-item cost for each element of this proposal, provide a **cost per acre** for the Terrestrial NIR LiDAR Data collection, Topo-bathymetric LiDAR and 4-Band Orthoimagery. Provide a lump sum line-item cost for each data layer and DEM to be delivered with the raw data and report. The **total price** and the **cost per acre** prices for this work will be considered as part of the evaluation factors.

Provide a lump sum line-item cost for each element of the Data Analysis proposal. Provide a lump sum line-item cost for each data analysis product as described in this proposal. The CTUIR project staff welcomes cost-effective alternatives to expedite the proposed implementation schedule; these alternatives **must** be provided as an additional line listed below the original cost of the completed proposal. If approved by CTUIR, the project design and specifications will be revised through design change and/or field change notices as applicable.

7. REFERENCES and PAST PERFORMANCE

References are required from at least three (3) projects similar to the proposed project. Include project name, contact name, address, and telephone number, a description of the project (i.e. type of work, location, size of the project and key personnel), project completion date, and the relationship of the contact person to the project referenced.

Past Performance. List all contracts for the past three years. To assess the past performance selection criteria, the CTUIR will assess such attributes as your history of cooperation with clients, and your history of performing quality and timely work. If the offeror has no history of past performance, a neutral rating will be given.

PART IV – SELECTION CRITERIA

Proposal selection will be completed through a quality-based selection process (QBS) by a review team. Factors listed in descending order of importance. The following selection criteria will be used to evaluate the content of the written proposals based on a weighted scoring method:

- I. **COST:** 50 points
 - a. Lowest price will be considered for addressing all questions and completion of all tasks (25); and,
 - b. A cost-benefit matrix will be applied for the remaining half of these points (25).
- II. **Adequacy of Technical Proposal:** 75 points
 - a. Proposal content and applicability of the approach for addressing and completing tasks (25);
 - b. Creative, efficient, and/or novel approaches presented (25);
 - c. Approach explicitly connected to project goal/objectives (15); and,
 - d. Adequacy of survey, modeling, data collection and data analysis in the proposals (10).
- III. **Past Performance:** 50 points
 - a. The percentage of contracts completed on time over the last 5 years (20);
 - b. The number of contract change requests submitted on the previous 5 contracts (20); and,
 - c. Demonstration of contractor to effectively communicate with the client (10).
- IV. **Personnel Qualifications:** 25 points
 - a. Technical experience of principal project staff related to the project performance (10);
 - b. Experience with similar projects (10); and,
 - c. Educational qualifications related to project performance (5).
- V. **Indian Preference:** 5 points

Must meet these factors in order to secure Indian Preference status;

 - 1. Membership in a Federally recognized Tribe;
 - 2. Indian Ownership of 51% or more;

3. Indian Control;
4. Indian Management;
5. Financing obtained by Indian person; and,
6. Equipment obtained by Indian person.

The RFP process is designed to result in the selection of a contractor who demonstrates the capability to complete the work at the best value. CTUIR reserves the right to contract all or portions of the work to individual contractors. Upon completion of the review and selection process, the CTUIR will negotiate with the most responsive/responsible Contractor.

PART V – Attachments

Attached Documents

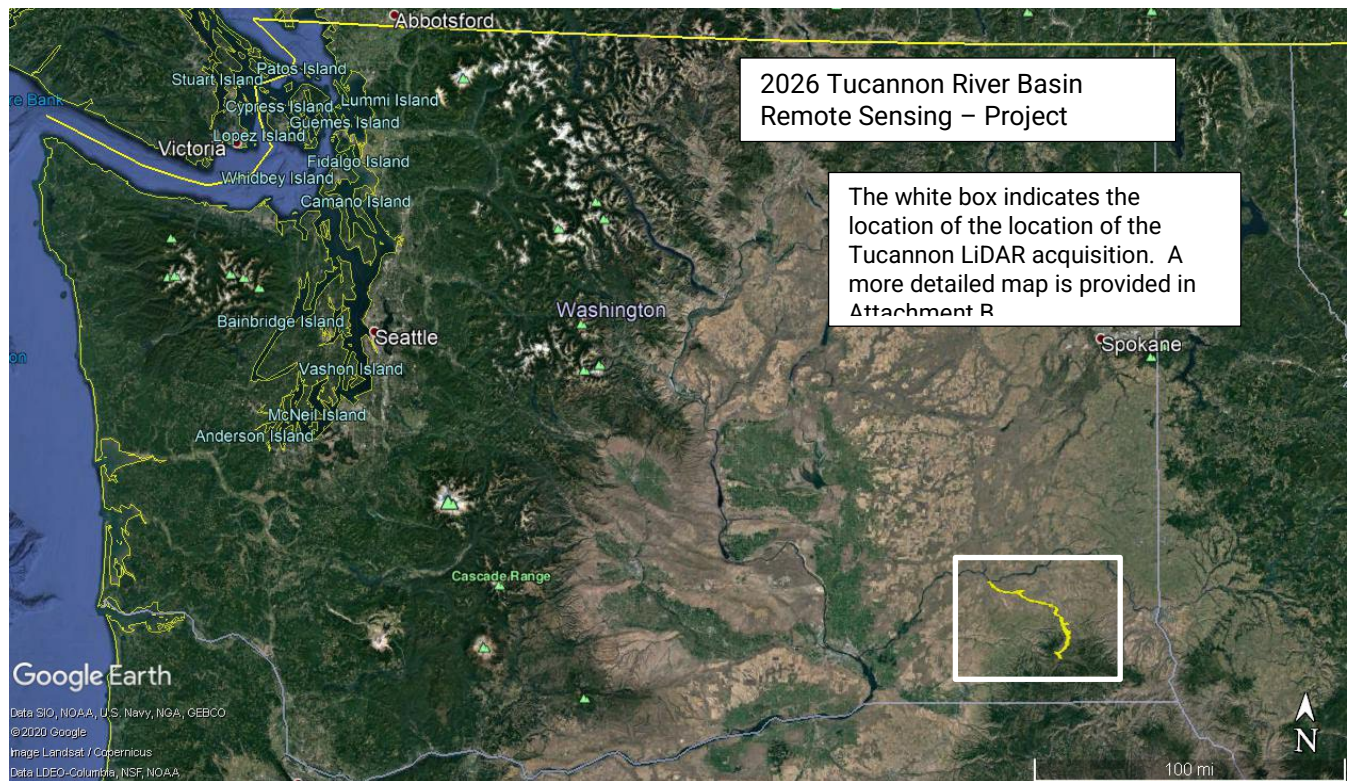
The following items are attached and incorporated into the RFP:

Attachment A: Project Site Vicinity Map

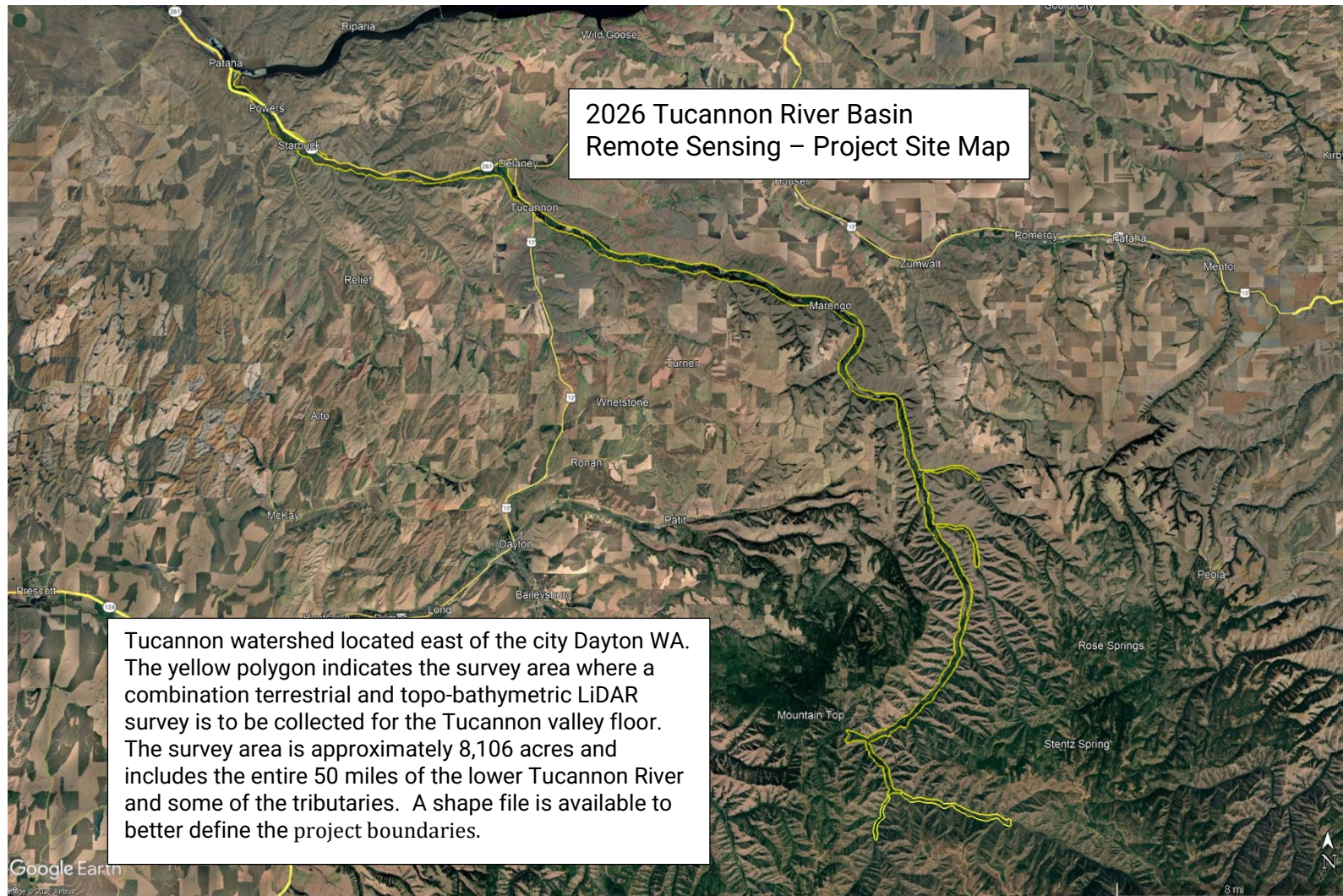
Attachment B: Detailed view of the project area and components.

Attachment C: GIS Standards and Requirements

Attachment A: Project Site Vicinity Maps



Attachment B: Detailed view of the project area and components.



Attachment C: GIS Standards and Requirements

The CONTRACTOR shall provide the TRIBES with a digital copy of all finished products that include geographic information; this includes but is not limited to surveys, aerial imagery and data developed in support of Tribal projects. All geographic information shall be delivered in a digital, georeferenced format compatible with ArcGIS desktop version 10.5.1. Metadata shall be included with all deliverables. The TRIBES use ESRI ArcGIS software as its standard GIS platform, SQL server as its primary database software and Windows as its operating system. GIS files being created for delivery to CTUIR shall be prepared in conformance with the requirements outlined in this schedule.

If attribute information are collected in addition to geographic positions the CONTRACTOR shall provide a digital data dictionary file that has been approved by the persons responsible for the contract for CTUIR in terms of expected content and format. The data dictionary file must describe all the associated attribute information. Included in the data dictionary must be a definition of each table and each column within the table. The table definition must include the purpose, structure, and a list of any associated features. The column definition must include the data type, data precision, and a brief description of each of the values that may be included in the column (including an explanation of any abbreviations or codes that are utilized). If an extensive number of abbreviations or codes will be utilized to populate a column, a separate domain list shall be provided. All domain list values must be accompanied by a description especially in the case of abbreviations. The preferred delivery format for all GIS attribute tables is a comma delimited, ASCII text file format with all column headings specified.

Data Collection Standards.

1. Survey Data Standards. CONTRACTOR shall:
 - i. use known Tribal survey monuments if working within the reservation boundary,
 - ii. meet a minimum level or accuracy for all survey work (1/100th of a foot), and
 - iii. submit all survey points with an attached attribute description for all of the points.
2. GPS Data Standards. CONTRACTOR shall ensure:
 - i. all geographic features collected have a unique identification which associates it with its attribute information in an associated table,
 - ii. all attribute tables have a digital data dictionary file,
 - iii. horizontal coordinates are documented and meet a minimum level of accuracy as is appropriate for the scope of work.

To determine appropriateness, the following guidelines shall be used:

- a. Survey Grade are the most accurate and most commonly used in situations where accuracy is essential (engineering applications, property boundary determinations, etc.), as such they are the preferred method. They typically provide true positional accuracy within a centimeter in the horizontal direction and elevation accuracies within 10 centimeters.
- b. Mapping Grade receivers are most commonly used by GIS professionals for gathering data for inventories, resource mapping, environmental management and infrastructure management. This method is permissible if Survey Grade cannot be provided. Mapping Grade must be differentially corrected GPS to reduce positional errors. Differential correction is the process of improving fixed positions utilizing data from a base station. With differential correction, horizontal accuracies from one to two meters can be achieved, while vertical accuracy is around 3 meters.
- c. Recreational Grade are the least accurate units, and are not permitted without express authorization from the TRIBES' Office of Information Technology. This is typically used for outdoor recreational activities, these receivers can have up to 20 meters in positional error.

3. Georeferencing.

- i. Survey grade information must be georeferenced to the approved coordinate system as adopted by the Oregon Legislature in the Oregon Revised Statute 93.330:

Oregon State Plane North
Projection: Lambert_Conformal_Conic
False_Easting: 8202099.737533
False_Northing: 0.000000
Central_Meridian: -120.500000
Standard_Parallel_1: 44.333333
Standard_Parallel_2: 46.000000

Latitude_Of_Origin: 43.666667
Linear Unit: Foot (0.304800)

Geographic Coordinate System: GCS_North_American_1983
Angular Unit: Degree (0.017453292519943299)
Prime Meridian: Greenwich (0.000000000000000000)
Datum: D_North_American_1983
Spheroid: GRS_1980
Semimajor Axis: 6378137.000000000000000000
Semiminor Axis: 6356752.314140356100000000
Inverse Flattening: 298.257222101000020000

- ii. Geographic data including data other than survey grade information, such as CAD, GIS, Aerial Imagery, and Photography must be georeferenced using the following coordinate system:

NAD83 UTM Zone 11 North
Projection: Transverse_Mercator
False_Easting: 500000.000000
False_Northing: 0.000000
Central_Meridian: -117.000000
Scale_Factor: 0.999600
Latitude_Of_Origin: 0.000000
Linear Unit: Meter (1.000000)

Geographic Coordinate System: GCS_North_American_1983
Angular Unit: Degree (0.017453292519943299)
Prime Meridian: Greenwich (0.000000000000000000)
Datum: D_North_American_1983
Spheroid: GRS_1980

- iii. All aerial photography and satellite imagery must be georeferenced and orthographically rectified unless otherwise authorized by the TRIBES' Office of Information Technology.

Data Development Requirements.

1. All intersecting lines shall be processed to remove overshoots and undershoots.
2. Zero length segments shall be removed.
3. Different feature types shall not share a common line segment. Snapping shall be set such that lines intersect.

4. All block definitions (CAD) shall be provided.
5. Equivalent CAD or ERSI symbol sets shall be provided.
6. A project report (metadata) shall be provided.
7. A detailed layer list shall be provided.

Data Delivery Requirements:

1. Vector Data – points, polygons and lines (parcels, roads, streams, buildings, etc.) – shall be delivered in the following formats:
 - i. ESRI Shape file format,
 - ii. ESRI File Geodatabase format,
 - iii. CAD data. Electronic files of all developed CAD data as georeferenced DWG files shall be provided including a PDF of survey or as-built with layers referenced.
2. Raster Data
 - i. remote sensing imagery shall be delivered as TIFF
 - ii. Photos as jpg
3. Lidar Data – CTUIR follows the Oregon Airborne Lidar Data Standard. All Lidar data collections must meet those standards. Contractor shall provide:
 - i. LAS files, containing classification values.
 - ii. Intensity grid
 - iii. Highest hits grid
 - iv. Bare earth digital terrain model as a DEM.
 - v. Surveyed benchmark coordinates used as reference and error evaluation.
4. Metadata. Accompanying the final GIS delivery shall be a sufficient level of metadata regarding the project files to allow a reasonable understanding of the source, accuracy, modifications to, and applicability of the data provided. All submitted metadata shall follow Federal Geographic Data Committee (FGDC) Standards specified in *Content Standard for Digital*

GeoSpatial Metadata (FGDC-STD-001-1998) (FGDC 1998). The FGDC Standards can be found at <https://www.fgdc.gov/metadata/geospatial-metadata-standards> All metadata should be submitted in text (*.txt), Microsoft Word (*.doc), or the ESRI compatible XML format (as compiled through ArcCatalog).

Minimum metadata standards for geographic information. The CONTRACTOR shall:

- i. Provide a purpose statement identifying the project for which the data was created,
- ii. identify the original source of the data,
- iii. identify the creator of the data,
- iv. indicate the date that the data was input into a GIS system,
- v. provide confidence of attribution data,
- vi. provide positional confidence of the object location (horizontal and vertical),
- vii. identify hardware used to collect and process the data,
- viii. identify software used to collect and process the data,
- ix. identify the name of the data dictionary file.

For questions concerning these requirements please contact the GIS Program at the Confederated Tribes of the Umatilla Indian Reservation.