

NOTICE TO ALL PROPOSERS

Any Firm or Corporation wishing to enter into a contract with the Wyoming Water Development Commission must possess a Certificate of Good Standing issued by the State of Wyoming Office of the Secretary of State to conduct business in Wyoming.

Contracts will not be finalized until Firms have met these requirements.

Proposers should also pay particular attention to project deadlines in the Scope of Services as these may have changed from previous years due to Commission approved changes to project funding approval and consultant selection schedules.



WYOMING WATER DEVELOPMENT OFFICE

6920 Yellowtail Road
Cheyenne, WY 82002

Phone: (307) 777-7626
wwdc.state.wy.us

Matthew H. Mead
Governor

Commissioners

Nick Bettas	Kellen K. Lancaster
Karen Budd-Falen	Sheridan Little
David Evans	Jeanette Sekan
Gerald E. Geis	Larry Suchor
Clinton W. Glick	Rodney Wagner

Harry C. LaBonde, Jr., P.E.
Director

REQUEST FOR PROPOSAL NO. 18-9 RIVER BASIN PLANNING - WATER SUPPLY INDEX, LEVEL I STUDY

SEALED NON-PRICED PROPOSALS, INCLUDING 10 PAPER COPIES AND 1 DIGITAL COPY IN PDF FORMAT ON A CD OR USB DRIVE, WILL BE RECEIVED by the WYOMING WATER DEVELOPMENT COMMISSION (Commission), 6920 Yellowtail Road, Cheyenne, Wyoming 82002 (82009 if shipping by means other than US Postal Service) until 1:00 p.m., March 30, 2018, at which time they will be publicly opened for PROFESSIONAL SERVICES required to conduct the River Basin Planning - Water Supply Index, Level I Study.

SEALED PRICE PROPOSALS, INCLUDING 1 PAPER COPY AND 1 DIGITAL COPY IN WORD FORMAT ON A CD OR USB DRIVE, shall also be submitted in a single separate sealed envelope containing itemized prices accompanying the copies of the non-priced proposals. These envelopes shall be opened after the firms to be interviewed have been selected and prior to the interviews. Neither proposal contents nor prices will be released at the proposal openings.

Any inquiries regarding this request for proposal should be directed to Peter Gill/Jodee Pring, Project Managers, Wyoming Water Development Office, 6920 Yellowtail Road, Cheyenne, Wyoming 82002, Telephone (307) 777-7626.

Your proposal shall be based on the following attachments "A", "B", and "C".

DATED THIS 5th DAY OF MARCH, 2018.

Harry LaBonde, Director
Wyoming Water Development Office

REQUEST FOR PROPOSAL NO. 18 - 9 (Cont'd.):

ATTACHMENT "A"

A. INFORMATION FOR PROPOSERS:

1. In order to be considered for an award, each proposal must bear the signature of the proposer or his authorized representative, the work must be supervised by a Wyoming licensed engineer/geologist, as appropriate, and the firm must be registered with the State of Wyoming.
2. Proposals received after the date and time specified will not be accepted or considered. **This requirement is strictly enforced.**
3. After the successful proposer is selected, the Commission will negotiate a final contract, scope of services, and contract price based on, but not limited to, the work items in Attachment "B". The Commission, at its sole discretion and through duly authorized contract amendments, may request the selected consultant to complete additional work or phases beyond the scope of services included in the initial contract.
4. After the final contract is negotiated and work begun, payment to the successful proposer shall be based on an itemized billing of work completed as derived from the approved hourly rate and reimbursable expenses price schedule approved by the Commission and contained in the contract for services. A total contract amount and an amount for each task will be specified in the contract. The total contract amount is controlling and shall not be exceeded without prior written consent of the Commission. Requests for payment must be made on forms provided by the Commission, or an approved equal, and must be properly executed. Payment will be made no more often than monthly.
5. The successful proposer shall furnish all materials, equipment and labor necessary to complete the study.
6. The State of Wyoming reserves the right to reject any or all proposals submitted.
7. The successful proposer shall be fully insured as to save the State of Wyoming harmless from any claims involving the employees or equipment used by the successful proposer and subconsultants while executing this service.
8. The successful proposer shall be familiar with all applicable state laws. The attention of prospective proposers is called to the requirements as to the conditions of employment to be observed and to all applicable laws affecting the work, particularly to the procurement procedures required by Section 9-2-1016 and Section 9-2-1027 through 9-2-1033, Wyoming Statutes.

9. No prospective proposer shall withdraw their proposal for a period of thirty (30) days after the actual date of proposal opening.

10. The Wyoming Water Development Office (Office) shall provide all possible assistance and cooperation to firms preparing proposals for this project. The proposer should understand that verbal comments may be subject to misinterpretation and are in no way binding on the individual, Office, or the Commission. If questions arise concerning any aspect of this request for proposals, the proposer should request clarification in writing. A copy of this request, as well as the written response, shall be provided to all firms receiving a request for proposals on the project.

11. The State of Wyoming hereby notifies all prospective proposers that it will affirmatively ensure that in any contract entered into pursuant to the advertisement, small or minority business enterprises will be afforded full opportunity to submit proposals in response to this invitation and will not be discriminated against on the grounds of age, race, religion, color, sex, national origin, or ancestry in consideration for an award.

12. The proposer hereby agrees that should they be awarded this contract, proposer shall not discriminate against any person who performs work thereunder because of age, race, religion, color, sex, national origin or ancestry.

B. PROPOSAL FORMAT:

The proposal shall be prepared and contain the following information:

1. Cover letter submitted with proposal.
2. Title page.
3. Table of Contents.
4. Introduction.
5. Scope of Services:

A detailed Preliminary Scope of Services is included in Attachment "B". State how you intend to conduct the activities presented in the Preliminary Scope of Services, and list all assumptions made in preparing the proposal. The proposed work/approach should be presented in the same format as in Attachment "B" and should address all the requirements contained therein.

6. Proposed Scope Alterations:

If you feel that the Preliminary Scope of Services (Attachment "B") may be improved by additions, deletions, or changes, please elaborate in this section. State your

alterations as specific task changes for the activities presented in the Preliminary Scope.

7. Qualifications:

- a. Briefly show your firm's capability for performing this project.
- b. List project team members and identify the project manager. As applicable, include a certification that the work conducted will be supervised by a professional engineer licensed in Wyoming as required by the provisions of WS 33-29-114 through WS 33-29-139 and a professional geologist licensed in Wyoming as required by the provisions of WS 33-41-101 through 33-41-121. Provide the Wyoming Board of Professional Engineer's license number of your firm.
- c. State which of your offices will perform the project work.
- d. Provide a resume for each key project member.
- e. Identify all proposed subconsultants, list the work to be performed by the proposed subconsultants, and provide statements of project specific qualifications for each subconsultant.

8. Listing of current clients whose interests may compete or conflict with the project described herein.

9. Work Schedule. Assume a Notice to Proceed will be issued late-June. Provide a bar graph schedule depicting the duration on each work item and the proposed phasing of the work.

10. Previous Work for Sponsor. List any projects for which your firm has been under contract to the sponsor during the period of 2013 to 2017. This list should include individual project names, dates and contract amounts.

C. PRICE PROPOSAL:

Submitted with the non-priced proposal, but in a separate single sealed envelope, shall be one copy of the price proposal(s) in paper copy and one digital copy in Word format on a CD or USB drive. The envelope shall be labeled with the project name and shall indicate that it contains the price proposal(s).

Two price proposals may be submitted. One proposal, prepared in the format of Attachment "C", must give costs to perform the Preliminary Scope of Services as specified in Attachment "B". A second price proposal may also be submitted, in a format similar to Attachment "C", specifying costs for the Preliminary Scope of Services with Alterations as per Item B.6 (Proposed Scope Alterations). The

proposed hourly rate and reimbursable expenses price schedules for each firm involved shall be included in each price proposal, and shall be in Word format.

D. CONTRACTOR SELECTION PROCEDURES:

The Commission will conduct the selection process in accordance with Sections 9-2-1016 and 9-2-1027 through 9-2-1033, Wyoming Statutes.

For those firms requesting consideration, the Commission has evaluated current statements of qualifications and performance data on file with the Office together with any applications submitted, and has selected not less than three (3) firms (if available) considered qualified to perform the required professional services to submit proposals. Consideration in the selection process by the Commission is based upon the ability of professional personnel, past performance, willingness to meet time requirements, location, residency, current and projected workloads, the volume of work previously awarded to the firm by the Commission, and the equitable distribution of contracts among qualified firms.

The Commission will evaluate proposals submitted by the short listed firms and, based upon these proposals, select those firms that will be interviewed. The qualifications, experience, and expertise of the project team and contents of the work proposal will be considered in selecting firms to be interviewed. Price will not be considered in determining consultants invited to the interview process.

The Commission will interview not less than three (3) firms, if possible, selected from those that have submitted proposals to do the work. The interview shall be recorded and include discussion of each firm's approaches to the project, projections of project costs, qualifications, ability to furnish required professional services, use of alternative methods for furnishing required professional services, and an estimated fee based on the Commission's description of the work. The estimated fee and other information provided throughout this process may be used as a basis for selection by the Commission of the most appropriate firm for contract negotiations.

REQUEST FOR PROPOSAL NO. 18-9 (Cont'd.):

ATTACHMENT "B"

A. AUTHORIZATION:

It is anticipated that the Wyoming Legislature will authorize the Wyoming Water Development Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in D. Scope of Services.

B. PROJECT DESCRIPTION:

1. Location. The extent of this project is the State of Wyoming.
2. Purpose. To perform a Level I study to inform the WWDC what areas of the state are most in need of additional supply, and document how water use and availability change over time. The Water Supply Index will provide current, credible information to assess water supply trends and minimize the costs of the River Basin Planning Program. Once the index is developed, biennial reporting can be provided to the Commission and public on water supplies.
3. History. As the River Basin Planning Program wraps up its second round of updates, improvement in the State's ability to plan for the management of water will come from more accurate data. This index is based on new mapping products and existing River Basin Plan information. Using the information gained in this effort, the River Basin Planning section can focus its public outreach efforts where projects are needed. This targeted approach will save time and money, yet continue to provide the WWDO with an active understanding of water supplies and highlight areas of change within Wyoming.

C. PROJECT REQUIREMENTS:

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief progress report monthly outlining the study status, progress, and results to date on or before the last working day of the month regardless of whether or not a billing statement is submitted.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer model or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed model names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital formats with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on that media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer models developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the model(s). All computer models, databases, and spreadsheets developed herein (written and digital formats) are due on the same date as the final report.

b. To facilitate the Commission's accurate evaluation of the Consultant's work product, computations, conclusions and recommendations, the Consultant shall:

- * Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that report.

- * Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

- * Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the draft final report. The project notebook shall be submitted with the draft final report.

3. Cost Estimates

The Consultant shall use the following guidelines in calculating Level III cost estimates.

Preparation of Final Designs and Specifications	\$ _____
Permitting and Mitigation	\$ _____
Title of Opinion	\$ _____
Acquisition of Access and Rights of Way	\$ _____
Pre-Construction Costs (Subtotal # 1)	\$ _____

Cost of Project Components	\$ _____
	\$ _____
Total Component Cost (Subtotal #2)	\$ _____
Construction Engineering Cost (Subtotal #2 x 10%)	\$ _____
Components and Engineering Costs (Subtotal #3)	\$ _____
Contingency (Subtotal #3 x 15%)	\$ _____
Total Construction Cost (Subtotal #4)	\$ _____
 Total Project Cost (Subtotal #1 + Subtotal #4)	 \$ _____

Note: Inflation costs, as determined by the consultant and project manager, will be applied to the Total Project Cost.

4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for the draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a professional engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a professional geologist licensed in the State of Wyoming.

5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan portion of an agricultural project will be financed at a 4% interest rate with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and Investments or USDA Rural Utility Service (RUS), and if required in the

Contract Scope of Services, the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

9. Well Permitting

All wells developed under this program shall list the State of Wyoming, Water Development Office as the permittee. The Consultant shall be responsible for obtaining the permit.

10. Verification Log

After all casing has been installed in the well, the Commission may require that a geophysical log be performed on the well to verify casing placement. A copy of this log shall be included in the final report.

D. SCOPE OF SERVICES:

This statewide analysis will lay the groundwork for an affordable method to assess water use and availability trends now and into the future. The results will provide a consistent, credible method to assess needs for supplemental water supplies.

Task 1. Scoping and Project Coordination Meetings

One (1) scoping meeting shall be held early in the project schedule to discuss the scope of the project as well as obtain input from Office staff. A review of the data described in Task 2 shall be conducted prior to the meeting. The Consultant will prepare a presentation and other visual aids as necessary to explain the project approach. The Consultant will budget for a minimum of two (2) additional project coordination meetings to be held in Cheyenne and two (2) to be held remotely. The meetings will be scheduled at the discretion of the Wyoming Water Development Office (WWDO) project manager depending on developments during the study. If set up by Office project manager, the Consultant shall

be prepared to utilize the State's cloud based platform for improved collaboration, document editing, and data sharing.

Deliverables include: materials presented at meetings and meeting summaries.

Task 2. Review of Background Information

The Consultant shall gather and review existing background information available through any number of relevant sources, including, but not limited to: Wyoming Water Development Commission (WWDC); Water Resources Data System (WRDS); Wyoming State Engineer's Office (SEO); Wyoming State Geological Survey (WSGS); U.S. Geological Survey (USGS). The WWDO project manager will help provide the consultant with existing data and describe what it is and how it can help support this effort. The following data and studies shall be reviewed:

- River Basin Plan water use data (WWDC)
- River Basin Plan water availability data (WWDC)
- Water System Survey Database (WRDS)
- EPA Water System reporting
- Hydrographer reports (SEO)
- Irrigated Lands (WWDC & SEO), NDVI remote sensing Google EarthEngine, and ESRI's Living Atlas
- Well Reporting data (SEO, SEOFLOW)
- NASS, CropScape
- Water Use Data Research Report, 2016 (SEO)
- Basin Plan Groundwater Determination Technical Memoranda, 2007 – 2018 (WSGS)

Task 3. Supplemental Supply Analysis

The intent of this task is to understand the areas of the state most affected during dry hydrologic conditions. This will include two datasets. The mapping of permitted place of use (POU) to the quarter-quarter and irrigated lands.

The place of use mapping shall include areas of the state served by a single direct surface water flow, and those lands with supplemental, secondary, and groundwater sources. POU mapping will be based on WSEO data available through ePermit. Methods, data structure, and tools for automating much of this work should be completed consistent with the GIS Standards Technical Memo 2018. Initial plotting of place of use ePermit GIS conversion tool should adjusted and supplemented by River Basin Plan irrigated lands mapping, Green River WyWRAG mapping, Irrigation master plans, reservoir studies, and digital linen plats (<http://SEO.wyo.gov/documents-data/linenplats>).

Irrigated lands based on NDVI, or similar classified remotely sensed data should be used for the development of irrigated areas. Existing polygons of irrigated areas from River Basin Plans, and place of use mapping should be used to calibrate NDVI classified data into irrigated lands. Ten samples from the Landsat record shall be developed, with a

minimum of two samples from wet and dry years, as defined by streamflow records in each River Basin Plan.

Deliverables:

1. Map showing resiliency to drought, based on access to stored water, groundwater, supplemental supplies, and priority date.
2. A map showing areas of irrigation during dry, normal, and wet hydrologic conditions.
3. A dataset masking areas of natural vegetation growth used in NDVI detection of irrigated lands.
4. A raster dataset showing number of incidences out of the record (at least 10 samples) that a location is irrigated.

Task 4. Development of a Water Use Index

Index: "a number derived from a series of observations and used as an indicator or measure;" - Merriam-Webster

The intent of this task is to correlate data points (observations) to overall water use in the state. The index is not necessarily an absolute quantity of water but a relative measure above or below a normal water year. Over twenty years of water use and availability data has been compiled in existing River Basin Plans. By relating key data points back to those basin-wide estimates, this index should provide a simplified approach that can be replicated more frequently than possible with existing methods. The data points that form the index should be available on a regular basis, every 2-3 years, and contain a history that can be correlated back to water use information contained in existing River Basin Plans. Datasets that form the index will have a documented correlation coefficient for wet, normal, and dry hydrologic conditions. A separate index will likely be needed for each basin, and should represent all water sectors. The methods used should be repeatable into the future.

Industrial, Municipal, and Domestic Water Use Sector

Based on the sources described below, the Consultant shall propose data points that are representative of water use from municipal and industrial users in 2017. These data points will form the basis for the municipal, domestic, industrial, and oil/mining portion of the water index.

The index sites must have historical data that can be used for correlation, and the data points should be accessible to the WWDO on a regular basis into the future. Index sites should be distributed across the state and include multiple sites in each river basin. Industrial and municipal water use will vary less based on hydrologic conditions and more closely with economic, population, and technology trends. This may require coupling of existing water reporting with ancillary datasets like active drilling rigs, new permits, water conservation programs, etc.

The Consultant shall compare index sites with basin-wide industrial, municipal, and domestic water use from sources described in Task 2. The Consultant shall then regress observations from index sites to overall water use estimates and provide a correlation coefficient for wet, normal, and dry hydrologic conditions. The Consultant shall estimate the portion of industrial, municipal, and domestic water use from groundwater based on POU mapping in Task 3 and well reporting data.

Potential sources for index data points include:

- WRDS Bi-annual Water System Surveys
- SEO Decree and Compact reporting
- SEO Hydrographer Annual Reports
- SEO Well use reporting data

Agricultural Water Use Sector

Based on the sources described below, the Consultant shall propose datasets that are representative of water use from irrigation and livestock in 2017. These data will form the basis for the agricultural portion of the water index.

Irrigated lands mapping from remote sensing will provide the index for irrigation water use. Data shall be distributed across the state and in each river basin. River Basin Plan water use numbers associated with irrigated area can be used to correlate NDVI data to water use. Ancillary data sources should be considered to improve the reliability of the index, e.g., NASS crop reporting, irrigation system surveys, diversion records, etc. Procedures for coupling irrigated lands and ancillary sources to derive a water use number is required.

The Consultant shall evaluate observed data with basin-wide agricultural water use from sources described in Task 2. The Consultant shall then regress observations from index data to overall water use estimates and provide a correlation coefficient for wet, normal, and dry hydrologic conditions. The Consultant shall estimate the portion of agricultural water use from groundwater based on POU mapping in Task 3 and well reporting data.

Potential sources for index data points include:

- Landsat NDVI data from ESRI's Living Atlas or Google EarthEngine
- NAIP NDVI data from ESRI's Living Atlas
- NASS data, CropScape
- National Land Cover Dataset
- SEO decree and compact reporting

Deliverables for Task 4:

1. Memo describing the methods used to derive the index. Description of data and sources that make up the index and the reasoning for including the data, reliability, and potential problems. Include the correlation coefficient used for the index by basin and by water use sector.
2. Software tool and procedural manual that can be used to derive the index and replicate the results.

3. Data utilized to create index, including spatial and non-spatial datasets, and metadata.

Task 5. Development of Hydrology and Climate Record

In concert with WRDS, the Consultant shall compile data for 2017 from existing sources including NRCS, PRISM, and NOAA. Figures and data that relate back to physically available water should be compiled, including: precipitation, temperature, drought conditions, and snowpack. Hydrology information should include runoff at key sites as a percentage of normal and end of year reservoir contents. The Consultant shall coordinate with WSGS to estimate recharge for the major aquifers of the state in 2017.

Task 6. Water Reporting

The Consultant shall provide a graphical format to report current status of water use and availability for 2017. This should include statistics by basin across the state. This should take the form of a printable booklet or circular as well as a web based infographic. Potential reporting parameters will evolve based on availability of data and audience, but may include:

- Annual Water use index for each of the seven Wyoming basins, and a state-wide index.
- Water use should be plotted against hydrologic, and precipitation data in Task 5.
- Ground to surface water use ratio
- Acreage of irrigated lands should be estimated, and reported as deviation from normal.
- Hydrologic and climate observations of the reporting year should be included.
- The value of WWDC Funded projects in 2017 by level and type.
- Areas of the state most susceptible to drought.

Deliverables for Task 6:

1. Short flyer or circular describing water use and supplies for 2017.
2. Web enabled version of the flyer describing water use and supplies for 2017.

Task 7. Draft Report

The Consultant shall submit to the Office five (5) hard copies of a draft memos and flyer describing the results of all work completed in this study no later than August 1, 2019. Five (5) CD, DVD, or USB drive copies containing the drafts in a text-recognized Adobe Acrobat (pdf) format will also be provided, along with two (2) CD, DVD, USB drive, or portable hard drive copies of the draft ArcGIS coverages (if applicable). The PDF version will be completely assembled into one standalone file, and shall be exactly the same version as the hard copy. Each CD, DVD, USB drive, or portable hard drive shall have a hard copy table of contents attached.

The Office project manager shall also provide the Water Resources Data System (WRDS) with both a hard copy and PDF copy of the draft report for comparison purposes. Issues discovered by WRDS during this comparison are the responsibility of the Consultant to correct. Upon completion of the quality-assurance process, WRDS will assign an URL for the online posting of the final report.

Task 8. Report Presentation

The Consultant shall budget for a meeting in Casper or Cheyenne to present the results to the Commission. This presentation is independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines.

Task 9. Final Report and Deliverables

After incorporation of the Office's and the Sponsor's review comments on the draft report, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) CD or DVD or USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to WRDS for final comparison purposes. The Consultant shall allow 1 to 2 weeks prior to the final deadline and shall also provide a verbal or electronic confirmation of this transmittal to the Office project manager.

The pdf version shall be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by WRDS between the hard copy and electronic copy during this final comparison are the responsibility of the Consultant to correct.

Upon completion of the final quality assurance process by WRDS, the Consultant shall submit all final documents and materials to the Office on or before October 15, 2019. These final documents and materials shall include: 1) Twelve (12) hard copies of the final report, 2) Twelve (12) hard copies of the executive summary. The summary should not exceed ten (10) pages.

Four (4) CD, DVD, or USB drive copies containing the final report, and executive summary in a text-recognized Adobe Acrobat (pdf) format will be provided. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Two (2) CD, DVD, or USB drive copies containing the final report and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, provided on a CD, DVD, or USB drive. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

Task 10. Geographic Information System Deliverables

The Consultant shall provide three (3) CD/DVD/Flash Drive/Portable Hard Drive copies of the GIS data. GIS data shall be composed and delivered according to the according to the “WWDO GIS Data Framework Plan” and the accompanying “GIS Standards Technical Memorandum.” A link to these two documents is available from the WWDC home page (<http://wwdc.state.wy.us/index.html>) under “Agency Products.” Consultants are strongly recommended to attend a webinar on GIS project standards hosted by WWDC and WRDS. This webinar will follow consultant selection. The Consultant may also view a prerecorded webinar that is available on the GIS Standards website referenced above. Newly collected or developed datasets shall follow these standards:

- a. **FEATURE MAPPING.** The Consultant shall obtain a core geodatabase template for feature mapping prior to any GIS mapping. Available at the GIS Standards website, these templates define the organization and naming of “core” GIS data. In conjunction with the Sponsor’s needs, any auxiliary GIS data layers can be integrated into the geodatabase template or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the GIS Standards Technical Memorandum. All features modified or created shall include field attributes that indicate contract number, consultant, date modified, and accuracy.
- b. **FORMATS and STANDARDS.** Simplified metadata shall be completed in accordance with standards described in the “GIS Standards Technical Memorandum.” Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a decimal degree coordinate system with a NAD83 datum, specifically “GCS_North_American_1983,” as indicated in the GIS Standards Technical Memorandum. Project GIS deliverables may also include linked non-spatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office core geodatabase template. Auxiliary GIS data layers can be provided as .shp files.
- c. **MAPS.** Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS (.mxd) files saved with relative path names to data sources.

REQUEST FOR PROPOSAL NO. 18-9 (Cont'd.):

**ATTACHMENT "C"
PRICE PROPOSAL SUMMARY
RIVER BASIN PLANNING - WATER SUPPLY INDEX, LEVEL I STUDY**

<u>Task</u>	<u>Estimated Cost</u>
1. Scoping and Project Coordination Meetings	\$ _____
2. Review of Background Information	\$ _____
3. Supplemental Supply Analysis	\$ _____
4. Development of a Water Use Index	\$ _____
5. Development of Hydrology and Climate Record	\$ _____
6. Water Reporting	\$ _____
7. Draft Report	\$ _____
8. Report Presentation	\$ _____
9. Final Report and Deliverables	\$ _____
10. Geographic Information System Deliverables	\$ _____

PROJECT TOTAL COST
Including Labor, Reimbursable, and Subconsultant Expenses \$ _____

In the spaces below, provide the Labor and Reimbursable Expenses of the prime consultant along with any additional Subconsultant Expenses which are included within the above tasks. These three amounts when added together should equal the project total cost listed above.

Proposed Labor Expenses (prime only)	\$ _____
Proposed Reimbursable Expenses (prime only)	\$ _____
Proposed Subconsultant Expenses	\$ _____

Firm Name and Address: _____

Signature of Firm President or Authorized Agent: _____
Employer Identification Number: _____