REQUEST FOR PROPOSAL
WATER QUALITY INITATIVE

WETLAND PRACTICE DELIVERY PROFESSIONAL SERVICES
October 2024

The Iowa Department of Agriculture and Land Stewardship (IDALS) is issuing a request for proposals (RFP) from potential consultants to assist in conceptual design, landowner contact, construction design, layout, permitting, and checkout of several water quality (WQ) wetlands designed to reduce nutrient loading downstream. Interested parties are invited to submit a proposal by 4:30 p.m. on Friday, November 8th, 2024. Proposals should be sent to the attention of Matt Lechtenberg by e-mail (matthew.lechtenberg@iowaagriculture.gov) by 4:30 pm on the posted closing date.

IDALS anticipates funding available for up to 3 WQ wetlands, through construction within the awarded contract term. Funding is available to cost-share the installation of the practices but is not part of this RFP.

IDALS intends to coordinate these services to help augment traditional conservation practice delivery methods. IDALS may enter into contract with multiple vendors depending on proposal review and location of interest by prospective consultants. Interested applicants must have a strong background in successful project design and implementation, specifically water quality wetlands. References and/or past project examples can be submitted or should be available upon request. Consultants should be experienced with USDA-Natural Resources Conservation Service (NRCS) standards and specifications.

Selected Consultant must coordinate with IDALS throughout the process to ensure the project(s) are developed in a manner consistent with IDALS processes and objectives. Consultant should be available to answer questions, provide as built survey and certify construction of practice meets NRCS specifications.

Specific phases to be completed by the selected Consultant include, but are not limited to, the following:

Phase 1: Conceptual site development and landowner contact
Phase 2: Wetland Site Plan
Phase 3: Final Design and Bid Document Preparation
Phase 4: Permitting (cultural resources, 404/401, floodplain, local permits, etc.)
Phase 5: Easement Boundary survey
Phase 6: Bid Letting Assistance
Phase 7: Construction Staking and Monitoring

Bids should utilize the attached “IDALS Wetland Bid Template” to provide cost estimates to complete each phase. Selected Consultant(s) will provide invoices itemized by phase as completed to IDALS. The agreed to costs will be in place for the entire 3 years of this agreement. Costs can be renegotiated upon conclusion of the agreement, if an extension is granted.

Table 1. Bid Template example (use the attached spreadsheet for submittals).

IDALS Wetland Bid Template		
		Cost/site
Conceptual Design and Landowner Contact	Phase 1	$ -
Site Design, Permitting and Construction Observation/Certification	Phase 2	$ -
	Phase 3	$ -
	Phase 4	$ -
	Phase 5	$ -
	Phase 6	$ -
	Phase 7	$ -
Total/wetland		$ -
Total sites (up to 3)*:		0
Total Proposal Amount:		**$ -**
*proposals should not exceed the anticipated number of practices installed in the RFP.		

Proposals may indicate 1-3 sites in the RFP they are willing to provide services for.

The selected Consultant will be expected to work closely with IDALS throughout the process and include travel to the location(s) of the prospective wetland sites.

The submitted proposal shall include a discussion of the Consultant's capabilities to perform the described phases to complete the number of practices identified to be designed. The submitted proposal shall also include a line-item cost by phase along with an overall cost for the life of the project (3 years). IDALS reserves the right to negotiate with the selected Consultant on final prices and contract amount. IDALS will evaluate the submitted proposals based on qualifications (past experience designing these types of wetlands, costs of proposal, project specific criteria, etc.) to complete the work as well as price.

Once selected, the Consultant shall enter into a contract with IDALS. The total estimated price shall serve as a not-to-exceed price for the contract. Amendments to the contract may be made as needed, subject to approval by both parties for work outside of the defined scope of work. Services may commence after the contract is fully executed by all parties. All work shall be coordinated with IDALS and approved prior to proceeding with the described scope of services and subsequent phases. The Consultant agrees to retain all records relating to this project for a period of three years following completion.

IDALS is targeting January 1, 2025 as the start date for this contract, which shall end December 31, 2027. The following dates are anticipated timelines established by IDALS. A Consultant who submits a proposal is agreeing to the following completion timelines or is invited to propose alternative, but not substantially different, dates.

- Posting to Targeted Small Business site — October 1, 2024
- RFP Posting/Notification — October 7, 2024
- Proposals Due — November 8, 2024
- Notice of Award — December 2, 2024
- Approved Contract — December 13, 2024
- Contract Start — January 1, 2025
- Project orientation meeting — by January 31, 2025

Scope of Services

Phase 1 – Conceptual site development and landowner contact

The initial phase of the project is to locate prospective water quality (WQ) wetland sites for landowner contact. Any and all design types (floodplain, pumped, breakpoint, hybrid saturated buffer, etc.) for water quality wetlands would be eligible through this RFP. Typically, these are found through a remote assessment using publicly available data (soils, LiDAR, etc.) to determine initial feasibility of the practice. Concept maps should contain the project's drainage area, wetland area, known tile locations/outlets/pumps/etc., and estimated 100-year storm bounce (if applicable). Review of sites should also assess proximity/potential impact to neighboring landowners and infrastructure (roads, pipelines, airports, wind energy, etc.) to ensure the site would be not impact those features.

Once a conceptual design has been developed, Consultant will send to IDALS for review and clarify any questions of the concept before proceeding to initial landowner(s) contact. IDALS will indicate approval of the conceptual design and develop an accompanying easement estimate (if applicable) and may request an IDALS representative to attend the initial landowner meeting to ensure program details are communicated to landowners consistent with IDALS programs.

If landowner(s) are interested in further developing the site, they will sign an "IP-1" agreement with IDALS to reserve funding to support the development of this site. The IP-1 does not require the landowner(s) to build the site but is a mechanism for IDALS to reserve funding until the site is determined feasible, and the landowner(s) agree to enroll in an available wetland program. Landowner(s) must also provide a completed sheet to indicate "known deed restrictions" and may need to also complete an "ROI (Record of Inquiry)" form to allow IDALS or others to access USDA information to support development of the project. Only WQ wetland concepts that receive signed IP-1s from landowners will be eligible through this RFP. The Consultant should factor in the number of conceptual sites needed to gain landowner interest for the number of sites listed in the proposal.

Phase 2 – Wetland Site Plan

Once positive response is received by the landowner(s) and IDALS approves moving into design, phase 2 of the project can begin. The topographic site survey will be completed. Topographic survey should cover the entire extent of the proposed project area with tile lines/outlets identified and grades determined. This phase also includes determining the location and size of the structure, including the spillway/outlet/pump/etc. design. This information will be used to facilitate the final design process. In the event that additional site information is needed, Consultant will communicate with IDALS requesting this additional information. If requested information exceeds the ability or timeliness of IDALS or its partners to complete, IDALS will work with the Consultant to determine an agreed to approach of gathering this information.

The location and height of the structure, wetland footprint, pump infrastructure, etc. shall consider various property lines, buried tile, and other manmade structures. It is imperative that the drainage rights of upstream and downstream landowners be maintained after the project is constructed. Any nearby tiles should be modified to allow them to drain into the wetland (if applicable) maintaining the minimum design separation of one foot between the invert of the tile and the normal pool elevation. Grading will be allowed as necessary to facilitate the design and maintain the intention of the practice and/or to limit impacts to other site features/neighbors. However, a minimum of six inches of topsoil will need to be placed over graded areas with water depths of less than three (3) feet to provide a suitable environment for wetland plants to develop. The wetland should be sited so that it meets the program eligibility requirements including: (1) the surface area of normal pool elevation at least 0.5 percent of the total drainage area (or equivalent for pumped sites), (2) the normal pool level area is shallow - ex. >75% 3 feet or less, (3) the minimum easement area incorporating the 100-year flood elevation, and (4) the final easement area (after squaring off to meet landowner objectives for

cropping adjacent areas) has a maximum ratio of 4 acres land to 1 acre of wetland unless a site specific waiver is obtained.

Some special conditions might be encountered that will require special design considerations, such as buried utilities, railroad, or other roadway right of ways. Additional compensation will be added to the contract as negotiated between IDALS and the Consultant for sites where these conditions are encountered.

The project designs, including the plans and specifications, must be in accordance with NRCS standards. Please note for this phase of the project that the wetland and spillway design shall meet the requirements outlined in NRCS Conservation Practice Codes (CPC) 410 – Grade Stabilization Structure, 656 – Constructed Wetland, and 657 – Wetland Restoration or other applicable standard(s). During this phase, the necessary information includes the normal pool elevation of the wetland, confirmation that the principal and emergency spillway can pass the design storm events, and that the upstream and downstream drainage rights have been maintained. Most sites will not require a detailed hydraulic analysis for this phase. For the purposes of this RFP, assume that this detailed analysis will be completed in Phase 3. If some sites require this analysis during this phase, the contract will be modified as needed.

Some sites will not be able to be sited as shown in the conceptual plan as submitted by IDALS for the RFP. Other sites may have other restraints that reduce the pool size or will require excessive grading. In these circumstances, we request that the Consultant submit conceptual preliminary layout of the wetland for review. No hydrologic or cost estimating should be completed until IDALS has had a chance to review and discuss the initial preliminary plan. Assuming an acceptable plan can be achieved, then a complete preliminary analysis will be completed and submitted.

The Consultant will submit the wetland site plan along with a preliminary construction cost estimate to IDALS for review. The preliminary site plan shall include the topographic information obtained, the structure/diversion/pump location and elevation, the outline for deep and shallow water elevations, the 100-year storm elevation, the location of anticipated borrow and fill areas, the elevation and location of tiles and any necessary modifications for daylighting, along with the outline of any anticipated grading. If necessary, the Consultant shall make any necessary design modifications as requested by IDALS. After the preliminary design is approved by IDALS, the Consultant shall submit the following deliverables:

- A completed Wetland Design Data Sheet (form provided by IDALS)
- A preliminary cost estimate
- An electronic form of the preliminary site design in PDF format with an aerial photograph background.

The Consultant will set up a meeting to negotiate the final easement area and obtain the landowner's final approval of the project. If the site will have an SWCD held easement, IDALS or designated representative must attend this meeting. The Consultant will attend this meeting and present the wetland site plan to the landowner(s). If a site includes multiple landowners, the Consultant shall assume they will only need to attend one meeting with all of the landowners present. If for some reason, the landowner(s) does not want to proceed with the project at this time or if the project cannot proceed because it fails to meet certain program requirements, then the Consultant will be compensated for the work completed to date and will not proceed with any of the other phases outlined below. If the landowner, based on this meeting, requires some changes that lead to additional engineering time or a redesign of the site and/or if the Consultant is requested to attend additional meetings with the landowner, this additional cost will be added to the contract at an agreed upon scope and price with an amendment to the contract.

Phase 3 – Final Design and Bid Document Preparation

This phase of the project shall not proceed until authorization is given to the Consultant by IDALS. This authorization cannot be given until the landowner commits to the project based on the wetland site plan completed in Phase 2. Once authorization is provided, the Consultant shall complete the project plans and specifications preparation. The plans and specifications must meet NRCS or other IDALS-approved requirements. NRCS construction specifications will be made

available that can be tailored for project specific requirements. Design details of the spillway should be completed in accordance with NRCS Standards. These documents can be obtained from the NRCS website using the Electronic Field Office Technical Guide (eFOTG) or an electronic copy from IDALS. The contract administration portion of the specifications (front-end documents) will be prepared by the Consultant in consultation with IDALS. The Consultant shall also prepare an engineer's cost estimate for the project.

The wetland and spillway design must meet the requirements set forth in NRCS Conservation Practice Codes (CPC) 410 – Grade Stabilization Structure and 657 – Wetland Restoration or other IDALS-approved standards. The principal spillway should be designed based site characteristics, but typically is a broad crested weir that will pass the specified design storm events. The design should generally include an emergency spillway. The spillway should be designed to pass the criteria outlined in Table 2 of CPC 410. The NRCS designs for similar wetland sites have employed a metal sheet-pile weir with a notch or a pre-fabricated semi-circle metal outlet structure. Sheet pile structures shall be designed with CWALSHT software developed by the Corps of Engineers, and a copy can be obtained from IDALS. The stilling basin must be designed as a drop spillway stilling basin. If the tailwater depth meets the criteria for ARS low drop structures, the Spreadsheet ARSLOWD2 developed by NRCS shall be used. If the tailwater is not high enough, the design shall meet Type C Drop Spillway with the length of the basin approximately doubled. When possible, the wetland should be sized to accommodate sediment accumulations for a minimum of 150 years. The major spillway system should be designed to have minimum maintenance and repair costs from storm flows since these are the responsibility of the landowner. The outlet design should also minimize initial construction cost. A core trench shall be included beneath the structure. The core trench should be designed to extend deep enough to intercept tile that may extend beneath the structure.

The final design shall include a separate draw down structure with adjustable stop logs to allow for management of the wetland. For the purposes of this RFP, the Consultant should assume that this outlet will be a corrugated metal pipe.

The vegetation requirements for the sites are already established in the specifications that will be given to the Consultant. The buffer seeding will be a standard Conservation Reserve Program (CRP) mix and the structure will have brome grass and straw mulch. There will not be a need for this portion of the project to be developed further.

The construction plans and specifications, updated engineer's estimate, and a copy of the floodplain, hydraulic, and hydrologic analyses will be submitted to IDALS for review. Any requested changes or modifications will be made by the Consultant at the time and then resubmitted to IDALS. The plans shall be submitted on 11 x 17-inch sheets unless otherwise agreed upon. IDALS will provide the Consultant with an electronic version (GIS) of the final negotiated easement with the landowner(s) to be included in the plans and for Phase 4.

Once the final design has been submitted, reviewed, and approved by IDALS, the Consultant shall provide the following deliverables:

- Final construction plans and specifications in a PDF format
- An updated Wetland Design Data Sheet
- An updated Engineer's Construction Cost Estimate
- A copy of the floodplain, hydraulic, and hydrologic analyses
- An updated site plan with wetland specific data as submitted for Phase 3 in PDF format

Phase 4: Permitting (cultural resources, 404/401, floodplain, local permits, etc.)

All necessary permits will be secured by the consultant on behalf of the landowner(s) with support from IDALS, if applicable. Design information developed in previous phases and other assessments necessary to provide supporting documentation to successfully receive the necessary permits will be completed in this phase. All necessary permits must be received, and documentation provided to IDALS before proceeding to Phase 6.

Phase 5 – Easement Boundary Survey

This phase of the project shall be completed in conjunction with the final design unless otherwise specified by IDALS. The submitted survey will be used by IDALS or other partner and included in the easement agreement with the landowner and the easement holder. The number of acres determined will also be used in the CRP-1 (or other funding) contract. The following is a list of requirements for this survey.

1. The survey must comply with the requirements set forth in the Code of Iowa. The landowner/participant name (owner of record) must appear on the plat. The Consultant shall furnish a filed 8-1/2 x 11 or 8-1/2 x 14 size plat with metes and bounds description. Larger plats can be prepared and submitted, but a reduced version must be included.

2. Any easement area surveyed will not include road right-of-ways or similar areas.

3. If the easement area is not adjacent to a public road, an access route description will only be required when requested by IDALS.

4. Permanent markers will be installed at each corner or angle change and every 250 feet on straight runs or every 500 feet on existing fences and adjacent to public roads.

5. Above ground witness markers will be installed by each permanent marker. The witness marker will be a 6-foot T-steel post and 4-foot (minimum length) of 2 inch solid PVC pipe slid over the T-steel post. The Consultant will be provided with small boundary signs to be installed on every other post.

6. In addition to metes and bounds description, global positioning system coordinates for each corner or angle change in the easement area shall be provided. These coordinates shall be provided in both formats as follows: (1) Latitude and longitude in decimal degree format using WGS 84 datum with the projection identified and (2) UTM NAD 83 Zone 15N Meters coordinate system. These coordinates shall be provided in an Excel spreadsheet. The engineer will also provide a shape file of the final easement to IDALS.

7. Unless otherwise designated, Consultant shall meet with a representative of the IDALS, local SWCD, or Wetland Field Specialist and the landowner prior to commencing the survey to ensure that the easement area is properly identified and delineated. The Consultant shall meet with the same parties after completing the survey and complete the post survey meeting certification.

Phase 6 – Bid Letting Assistance

Wetland projects using IDALS financial assistance will be required to follow State of Iowa public bidding procedures. IDALS with input from the Consultant, will establish dates for the public notice publication, as well as dates, times, and locations for the pre-bid meeting and bid opening. IDALS will e-mail the notice to bidders to IDALS's current list of contractors and submit the public notice to the necessary newspapers. IDALS will make the plans and specifications available on its website. Several hard copies will be assembled by the Consultant, including one copy for IDALS. The plan holders list and distribution of the contract bidding documents will also be completed by the Consultant. A representative of the Consultant shall attend the prebid meeting. The first portion of the meeting will be held indoors and will include a discussion by the Consultant of the contract requirements and a discussion by the Consultant about the project construction. A site visit will be held immediately afterwards.

The Consultant will distribute meeting minutes and any contract addenda to the plan holders. The Consultant is required to submit an electronic version of their discussion and comments at the prebid meeting. The Consultant shall also provide any necessary drawings and text that may be needed as part of an addendum. Consultant will be responsible for answering questions related to the plans and specifications from contractors during the bidding process.

IDALS will open bids on the specified day and prepare the bid tabulation. The Consultant shall be available by telephone at the time of the bid opening to answer any questions that may arise. IDALS will send out the bid tabulation to all contractors who submit a bid, the Consultant, and any others who request a copy. IDALS will send out a Notice of Award to the responsible lowest bidder that includes the contract and performance bond. IDALS will send out a Notice to Proceed after all the contract documents have been received and found to be in order. The Consultant will be copied on all correspondence to the contractor.

Phase 7 – Construction Staking and Monitoring

Wetland projects using IDALS financial assistance will be requires the Consultant to provide construction monitoring and surveying during construction after the contract award is complete. The Consultant is required to attend a pre-construction meeting with the contractor and IDALS at the site. The Consultant will prepare a record of the meeting and submit it to all the parties in attendance.

The Consultant shall provide the construction staking as requested by the contractor. The construction staking shall include staking the structure, offsets, general grading stakes in borrow area, and a benchmark for the spillway structure. If the Contractor uses GPS mounted equipment, Consultant shall provide the digital file and set control points. The Consultant shall also perform a survey at the end of the project as needed to determine final quantities on pay items. For the purposes of the RFP, the Consultant should assume that only a total of three visits for construction staking will be required, one at the beginning, one interim, and the last to establish final quantities.

The Consultant shall provide monitoring during construction of the project. The Consultant shall make a minimum of two visits per week during major portions of the construction. Additional visits shall be made as necessary to observe essential portions of the construction, including excavation of the core trench, tile exploration trench, sheet pile installation, grouting of riprap, drawdown structure installation, and seeding. The Consultant shall prepare a record of observations including basic information such as: weather conditions, visitors to the site, equipment at the site, materials delivered to the site, work completed that day, and any concerns or issues discussed with the contractor and resolutions determined. Copies of these field records will be sent to IDALS on a regular basis. Digital photographs of various portions of the work will also be taken during construction. For the purposes of this RFP, the Consultant shall assume the total construction period will be completed in a two-month period.

The Consultant shall also provide engineering oversight to the field observer to make sure the project is being constructed in accordance with the plans and specifications. The Consultant shall make sure the Contractor is aware of seeding date deadlines and shall notify IDALS of the seeding status. The engineer of record shall be available to answer questions that need the response of an engineer. A representative for the Consultant shall also attend all progress/pay meetings. The Consultant will verify quantities and submit information to IDALS to prepare pay requests, change orders, and contract amendments. These shall not be held more frequently than monthly. For the purposes of this RFP, the Consultant shall assume a total of two pay request meetings will be necessary for each site.

After the majority of the construction is completed on a project, either prior to seeding or shortly thereafter, a meeting shall be coordinated by the engineer that will include the landowner, contractor, Wetland Field Specialist, engineer, IDALS and maybe other local SWCD or FSA representatives. The purpose of this meeting is to allow those in attendance to review the work that has been completed and discuss any additional work or modifications that may be necessary prior to final acceptance.

If construction of the wetland is done with or without non-IDALS financial assistance, the following will be required after completion of the project the consultant shall submit the following deliverables:

- The engineer of record shall submit a letter of completion and acceptance to IDALS certifying that the project has been completed in general accordance with the plans and specifications and the date that this was completed.

- All copies of field records and reports.
- Meeting minutes for pre-construction meeting and final site meeting with landowner, Wetland Field Specialist (WFS), and IDALS.
- A flash drive or data sharing site that includes a copy of all digital photographs taken of the site during construction.
- An electronic copy (pdf) of a plan sheet highlighting any major changes that were made during construction that vary significantly from the original plan used for bidding.

These documents will be required prior to final invoicing by the Consultant.