### **CONSERVATION BOARD** 14910 110<sup>th</sup> Avenue Davenport, Iowa 52804

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ROGER A. KEAN Executive Director JOHN (SKIP) O'DONNELL Chairman DOUG GRENIER Vice-Chairman CAROL M. FENNELLY BETH MCALEER RICHARD MOHR

## REQUEST FOR PROPOSALS AND QUOTES FOR DESIGN AND ENGINEERING SERVICES

For planning, design, permitting, and engineering of elements associated with the restoration of West Lake Park (Lake of the Hills, Bluegrass Lake, Railroad Lake, and Lambach Lake).

The Scott County Conservation Board (SCCB) is seeking a qualified consultant to complete the planning, design, engineering, and permitting for a variety of projects to improve water quality at West Lake Park. The selected firm will provide engineering and planning services for all phases of the project. The selected firm will be working for the Scott County Conservation Board (SCCB) in consultation with officials from the DNR Lake Restoration and Fisheries programs. The overall scope of work for this restoration project will include three phases.

**Phase I** will include services required to evaluate the feasibility and usefulness (in terms of nutrient and sediment reduction and lifespan) of current and potential catch basins to be constructed in West Lake Park (see figures 1 and 2), to assess existing conditions at Railroad Lake, Lambach Lake, Bluegrass Lake, Lake of the Hills, and the associated watersheds. The selected firm will also evaluate the feasibility of mechanical vs. hydraulic dredging at these lakes, evaluate the area of county land as a potential spoil site (see figure 2) for containing and stabilizing spoil from the dredging operations, assess the existing outlet structure of each of the lakes and determine the drawdown capability of each lake, evaluate regions proposed by SCCB for shoreline stabilization, and evaluate the feasibility and usefulness of constructing at least one bio-swale or bio-cell near one or more of the major parking areas within the park. Bathymetric maps are included as figures 3 through 7.

In addition to providing a report on the evaluation and analysis of the above aspects of the project, the consultant shall provide 35% engineering design documents and cost estimates for in-park watershed practices (current and potential catch basins to be constructed in West Lake Park and at least one bio-swale or bio-cell near one or more of the major parking areas within the park).

**Phase II** will include planning services, final engineering design documents with cost estimates, bid letting services, and construction inspection and survey staking to complete chosen in-park watershed practices.

The consultant shall also provide 35% engineering design documents and cost estimates for in-lake practices. This includes a dredge plan for the lakes within the park, and a plan for the containment and stabilization of the removed sediments. The plan for the main lake will also include description and design of fish habitat features, shoreline stabilization, and repair or upgrading of outlet structures (if needed).

**Phase III** of the project will include planning services, final engineering design documents with cost estimates, bid letting services, and construction inspection and survey staking to complete chosen in-lake practices.

The selected firm may also be engaged to provide other services related to improving water quality in Lake of the Hills. The Conservation Board will use the "Selection Criteria" set forth in this request to select a firm. If the SCCB determines that additional information is needed to make a final selection, the Board may require additional information and/or a meeting with the top ranked firms.

The consultant selected will enter into a contractual agreement for services with the SCCB. If for any reason the Scott County Conservation Board cannot reach an agreement with the top ranked firm, then the Board reserves the right to reject all proposals or enter negotiations with the second highest ranking firm, and so on down the ranking list.

This request invites consultants to submit a proposal for the items identified under the Scope of Work and a Statement of Qualifications with their proposals. The SCCB is requesting that the proposals also include a Cost Proposal for Phase I of the project, as well as hourly rates for Phase II and Phase III of the project. Hourly rates provided by the consultant will be used as a basis for contracting any additional design and oversight work to be completed as a part of this restoration project.

## **GENERAL PROVISIONS**

This RFP does not obligate the SCCB to award a contract to any firm, nor to pay any cost incurred in the preparation of the proposals submitted in response to this request. The SCCB reserves the right to accept or reject any or all proposals received.

## PROPOSAL REQUIREMENTS

General qualifications and performance data required to conduct this project will be determined by comparative evaluation on the basis of the "Selection Criteria" set forth in this request. Any additional related information will be evaluated.

RFP Released:	July 21, 2017
Optional On-Site Meeting	July 27, 2017
Written Questions and Requests for Clarifications Due:	July 28, 2017
Mandatory Letters of Intent to Bid Due:	August 2, 2017
Answers to Written Questions Issued:	August 8, 2017
Bid Proposals Due:	August 17, 2017

Prospective consultants are invited to submit written questions and requests for clarification concerning this RFP. The questions and requests for clarification must be in writing and received by the Issuing Officer before July 28, 2017. Written responses to timely questions will be issued no later than August 8, 2017 to all consultants who submit a Letter of Intent to Bid.

Submittal Location:	Scott County Conservation Board West Lake Park Headquarters 14910 110 <sup>th</sup> Ave Davenport, IA 5280
Issuing Officer:	Roger A. Kean, Executive Director, SCCB Office: 563.328.3280 Fax: 563.381.2805 Email: <u>conservation@scottcountyiowa.com</u>

**Submittal Quantities:** Three paper copies and an electronic (PDF) file are required. At least one copy of the proposal must be signed by an official empowered to contractually obligate the proposing firm.

## STATEMENT OF QUALIFICATIONS

A Statement of Qualifications must be submitted, which shall include:

- 1. The Consultant's name and address, and a brief history of the firm.
- 2. A description of the services to be provided by (a) the consultant, and (b) subcontractors (if any), along with a description of their experiences similar to what is required for this project.
- 3. Names of specific individuals who will be assigned to this project, and their relevant experience, i.e. project manager, engineer, soil scientist, limnologist, geomorphologist, hydrologist, archaeologist, landscape architect, technicians, botanist, etc., and their ability to provide project management and environmental assessment services. We are especially interested in previous experience with dams, control structures, nutrient transport and recycling, dredging and urban conservation bmp's.
- 4. The location of the office where the majority of the work will be originating.
- 5. Familiarity with CCB's, IDNR, lake restoration, design of dams and control structures, bio-swales and other urban conservation practices, dredging and spoil containment; and regulatory agencies, including the Iowa DNR, USDA, NRCS and U.S. Army Corps of Engineers and EPA.
- 6. Three references including project name(s), contact person, address and phone number.
- 7. Any other information that could be relevant to the selection process such as history of providing accurate cost estimates for similar projects and ability to deliver on schedule.

# SCOPE OF WORK – Phase I

The consultant will be working with staff of the Scott County Conservation Board, in consultation with the DNR, in planning and decision making related to size and scope of each project element. The consultant selected for this project will enter into a contractual agreement with the SCCB and provide the following services.

- 1. Site analysis through 35% design including a cost estimate and estimated lifespan (sediment storage capacity) for proposed ponds/wetlands listed in figures 1 and 2 of this request for proposal.
- 2. Evaluation of existing catch basins within West Lake Park including remaining lifespan for structures. If structures have reached capacity, then provide 35% design to re-establish depth and a cost estimate, as well as an estimate of sediment load reduction to the lake that each basin will provide if depth is improved.
- 3. Evaluate major parking areas within the park, assess the feasibility of constructing a water retention feature for each major parking area within the park, and provide 35% design and cost estimate for constructing a bio-swale or bio-retention cell to infiltrate water coming off of the parking lots.
- 4. Provide cost estimates for construction services and construction inspection services, itemized to each component of the watershed portion of the project.
- 5. Prioritize dredging, both in location and quantity, for the suite of lakes within West Lake Park. Determine where storage capacity is most needed and dredge with the aim of providing sediment storage capacity, minimizing excessing aquatic vegetation that reaches the lake surface, and considering potential for shoreline angling access.
- 6. Evaluate the potential spoil site identified in figure 2 for feasibility to spoil dredge materials associated with the removal of sediment from Lake of the Hills, Railroad Lake, Lambach Lake and Bluegrass Lake.
- 7. Provide conceptual design and a cost comparison for mechanical versus hydraulic dredging within Lake of the Hills, Railroad Lake, Lambach Lake, and Bluegrass Lake.
- 8. Assess the drawdown capability of each lake: Lake of the Hills, Railroad Lake, Lambach Lake, and Bluegrass Lake. Determine if and what infrastructure improvements need to be made to allow for drawdown capability in all lakes.
- 9. Evaluate regions proposed by SCCB for shoreline stabilization and plan for installation of fish habitat.

## SCOPE OF WORK – Phase II

The consultant will be working with staff of the Scott County Conservation Board, in consultation with the DNR, in planning and decision making related to size and scope of each project element. This contract will be negotiated after Phase I is at or near completion. If an agreement cannot be reached for Phase II, the SCCB retains the right to engage another consultant. The consultant selected for this project shall provide the following services.

- Final design including surveys; engineering and construction plans; permit submission; archeological investigations; drainage; structural; geotechnical; plant materials, wetland mitigation/delineation services and all other miscellaneous elements required for building new and rehabilitating existing ponds/wetlands within West Lake Park and bio-swales or bioretention cells to infiltrate water coming off of the parking lots as determined at the end of Phase I of this project.
- 2. Plans and specifications for bid letting for watershed portions of the project.
- 3. Application and secure all required permits from the Federal, State and Local governments.
- 4. Construction administration for bid letting of the watershed portions of the project including a pre-construction meeting and engineering oversight throughout the construction of the project.
- 5. Site assessment and analysis through 35% design documents and cost estimate for dredging Lake of the Hills, Lambach Lake, Railroad Lake, and Bluegrass Lake including a plan for transport and stabilization of dredge material.
- 6. Provide a plan, 35% design documents and cost estimates for installation of fish habitat, shoreline stabilization and repair/replacement of outlet structures as approved by SCCB in cooperation with the IDNR Fisheries Biologist
- 7. Provide cost estimates for construction services and construction inspection services, itemized to each component of the in-lake portion of the project.

### SCOPE OF WORK - Phase III

The consultant will be working with staff of the Scott County Conservation Board, in consultation with the DNR, in planning and decision making related to size and scope of each project element. This contract will be negotiated after Phase II is at or near completion. If an agreement cannot be reached for Phase III, the SCCB retains the right to engage another consultant. The consultant selected for this project will provide the following services.

- Final design including surveys; engineering and construction plans; permit submission; archeological investigations; drainage; structural; geotechnical; plant materials, wetland mitigation/delineation services and all other miscellaneous elements required for dredging of lakes within West Lake Park, stabilization of dredge containment areas, fish habitat installation, shoreline stabilization, and repair/replacement of outlet structures as determined at the end of Phase II of this project
- 2. Plans and specifications for bid letting for in-lake portions of the project.
- 3. Application and secure all required permits from the Federal, State and Local governments.
- 4. Construction administration for bid letting in-lake portions of the project including a pre-construction meeting and engineering oversight throughout the construction of the project.

Note: Any plans provided under Phase I, Phase II, and Phase III shall be submitted in a in a full color, high resolution pdfdigital format. Final plans shall be stamped by an engineer licensed in the state of Iowa.

### Cost Proposal - cost information submitted in this proposal shall include

- 1. Fixed Fee for Phase I of the project.
- 2. Preliminary construction cost estimate of all Phase I elements (line itemed to consultant fees, consultant fees for construction related services, and preliminary construction estimates).
- 3. Consultant Fees (hourly rates) for any negotiated services for Planning, Engineering, Design, Permitting, Construction Oversight, Construction Inspection and Deliverables for Phase II and Phase III of the project.

## **ADDITIONAL INFORMATION and OPTIONAL ON-SITE MEETING**

Available electronic resources related to the West Lake Park are available upon request. You will need to contact Michelle Balmer at <u>michelle.balmer@dnr.iowa.gov</u> in order to obtain these records via Google Drive.

If consultants are interested in obtaining additional information, an optional on-site consultant information meeting has been scheduled for 10 a.m., July 27, 2017, at Scott County Conservation Board, West Lake Park Gate 3, 14910 110th Ave Davenport, IA 52804. The meeting will include an indoor presentation and a tour of some of project element sites. Pre-registration is required to attend this meeting. To register, please call 563.328.3280 or Email: conservation@scottcountyiowa.com

## **SCHEDULE**

Consultants should propose a schedule of completion and project milestones for Phase I of the project. The schedule should target a completion date for the report, 35% design plans and cost estimates. The consultant shall submit completed documents and all supporting materials to the SCCB in an electronic format – pdf preferred.

## CONSULTANT SELECTION PROCEDURES

The SCCB will evaluate all proposals submitted in response to this request. Each proposal will be evaluated and ranked based upon factors listed in the "Selection Criteria" section of the RFP.

## **NONDISCRIMINATION**

In accordance with Title VI of the Civil Rights Act of 1964, Title 49, Code of Federal Regulations, the SCCB must ensure that qualified disadvantaged business enterprises (DBE's) are afforded full opportunity to submit proposals in response to this request; and further that no person will, on the grounds or race, color or national origin be excluded from participation in any program or activity for which the SCCB is receiving financial assistance.

### PROPOSAL SELECTION CRITERIA

Name of Firm:

### Selection Criteria Used to Guide the Ranking Process

### 1. Firm and Individual Qualifications

Services to be provided

Qualifications and experience of principals and key personnel

#### 2. Experience Considerations

Specific project type experience

Similar project types (complexity, size, etc.)

References from similar projects

3. Ability to Perform Work

Availability of staff

Other considerations

Services to be provided by other consultants

#### 4. Quality and Thoroughness of Proposal

#### 5. Cost Estimate

Note: The Cost Estimate to perform the services is considered with evaluation criteria 1 through 4 in the ranking process. The selected firm will be engaged in negotiations for a formal agreement of services and contract after the final scope of services has been developed. The final contract amount should not vary by more than 10% from what is proposed in this proposal. In the event a formal agreement and contract cannot be negotiated with the selected firm, the SCCB reserves the right to negotiate with another qualified firm associated with this RFP or reject all proposals.

#### Addendum to the Lake Restoration RFP

#### Background or Need for the Lake Restoration Effort

This RFP is the culmination of a cooperative effort between multiple agencies to investigate and address the environmental issues effecting West Lake Park. Water quality is a growing concern to the people of Scott County and residents of Iowa. It is important to address these issues to ensure not only the waters of West Lake Park are a clean and safe for us and our children, but all the waters of Iowa.

Lake of the Hills, located within West Lake Park, is a 54.6 acre lake has a watershed of approximately 1500 acres, representing a watershed to Lake Ratio of 27.5: 1. Thirty-eight percent, or 620 acres of the watershed, is located within the boundaries of West Lake Park, including 90.6 acres of water and 521.1 acres of land. Sixty-two percent of land, or 1009.7 acres, lays outside the current park boundaries, including Lake Canyada, a privately owned lake that drains directly into Lake of the Hills.

The lake is one of the most utilized publicly owned areas in Scott County. The park estimates that approximately 500,000 visitors come to the park each year. During the summer months, the campground is filled most days, and most park shelters are rented throughout the summer months. The park is in the process of building cabins to attract additional users to the park. Additionally, West Lake Park hosts the Quad Cities Triathlon annually, with approximately 700 participants. Other daily uses include fishing, canoeing/kayaking, environmental education, hiking, photography, bird watching, relaxation.

Lake of the Hills is currently on the state of Iowa's impaired waters list for Chlorophyll-a, which has been attributed to high phosphorus levels in the lake. The Iowa Department of Natural Resources (IDNR), Watershed Improvement Section, produced a Total Maximum Daily Load Report (TMDL) in 2016 to identify sources of pollution to the lake and suggest ways of improving water quality with the goal of removing the impairment at the lake. Ambient lake data from the IDNR was also used in conjunction with other data collected for constructing the watershed plan for Lake of the Hills that was completed in 2016. Both the TMDL and the watershed improvement plan identified phosphorus as the principal nutrient of concern, with a secondary goal of reducing the amount of sediment to the lakes in the park. High rates of sedimentation have occurred since the lake complex was built, with Railroad Lake, Lambach Lake, and Bluegrass Lake having lost most of their sediment storage capacity. The majority of the phosphorus pollution appears to be originating throughout the watershed, so targeted efforts are taking place to reduce both phosphorus and sediment pollution from both within the park and outside of the park in the watershed. Excess phosphorus causes large blooms of algae which makes the lake aesthetically objectionable and can cause a number of other problems including low oxygen, stress on the aquatic community, poor water clarity, and in some cases, human health concerns associated with high levels of toxins produced by several genera of blue-green algae called cyanobacteria.

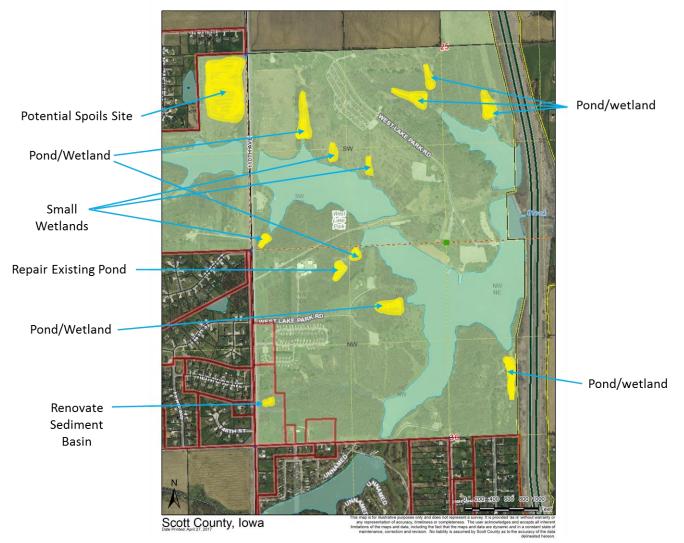
Figure 1. Potential ponds/wetlands to be evaluated (West side of the park)



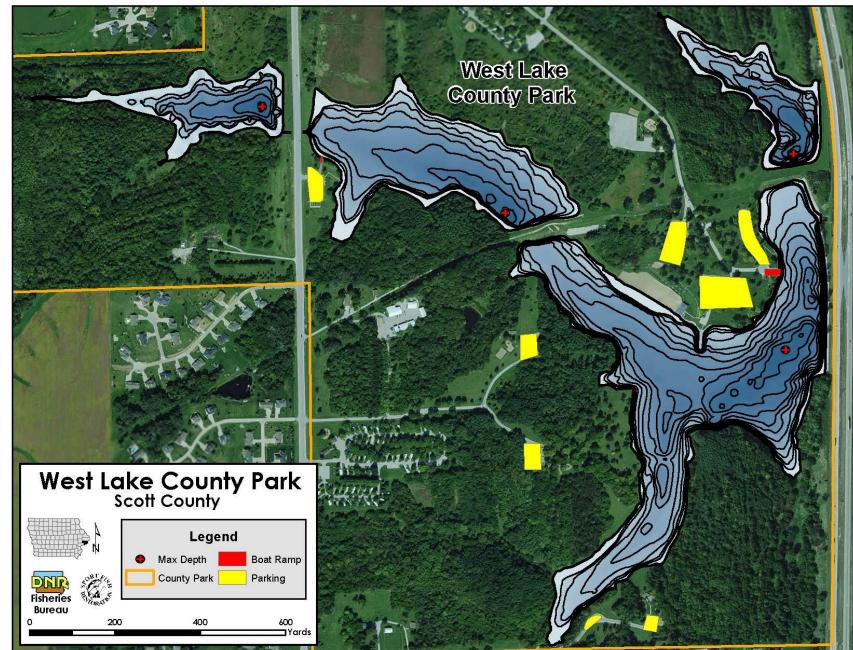
This map is for illustrative purposes only and does not represent a survey. It is provided as is without warranty or any representation of accuracy, timeliness or completeness. The user acknowledges and accepts all inherent limitations of the maps and data, including the fact that the maps and data are dynamic and in a constant state of maintenance, correction and revision. No liability is assumed by Scott County as to the accuracy of the data delineated hereon.

Scott County, Iowa

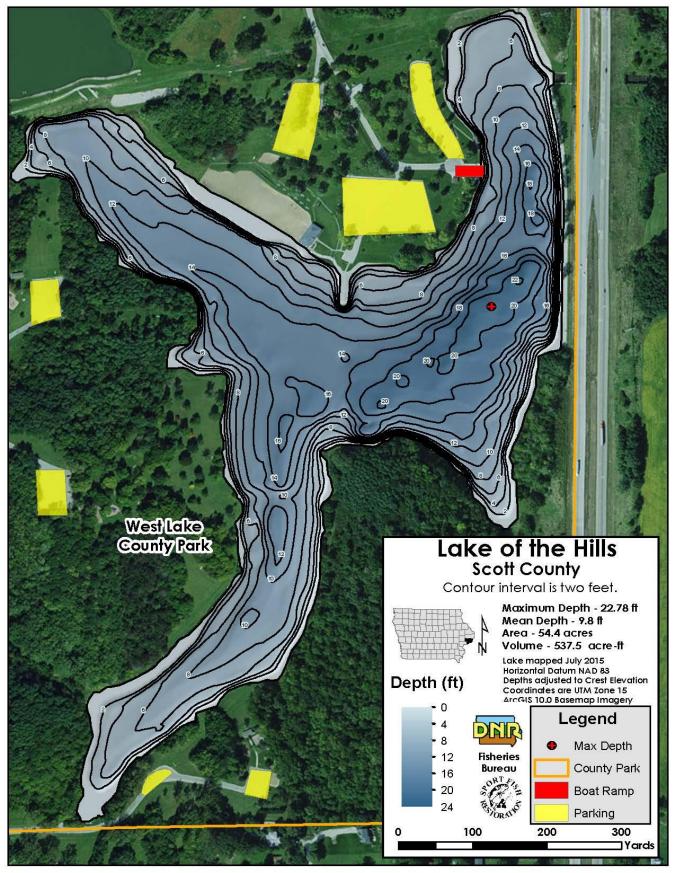
Figure 2. Potential wetland/ponds to be evaluated and location of the potential spoil site for the restoration project at West Lake Park.

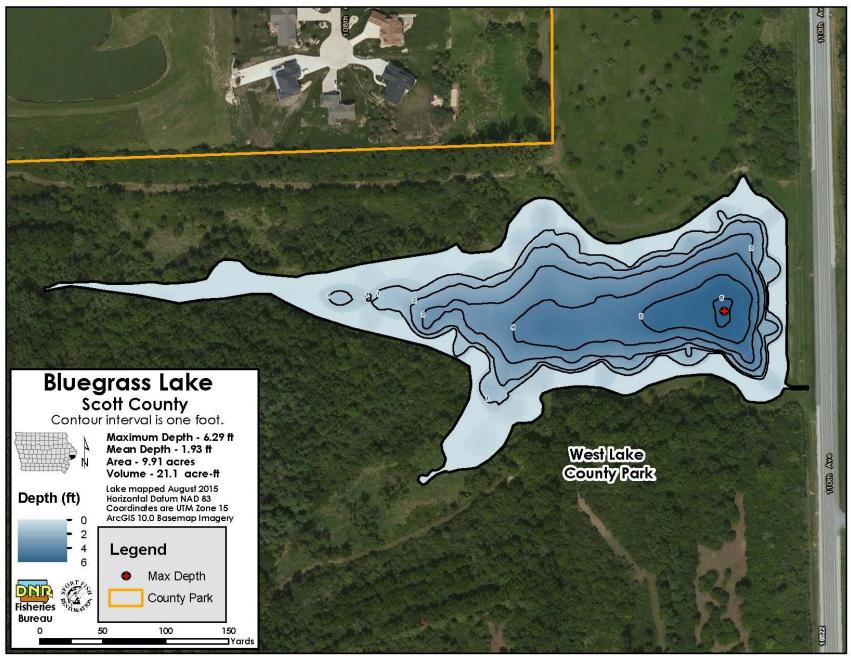


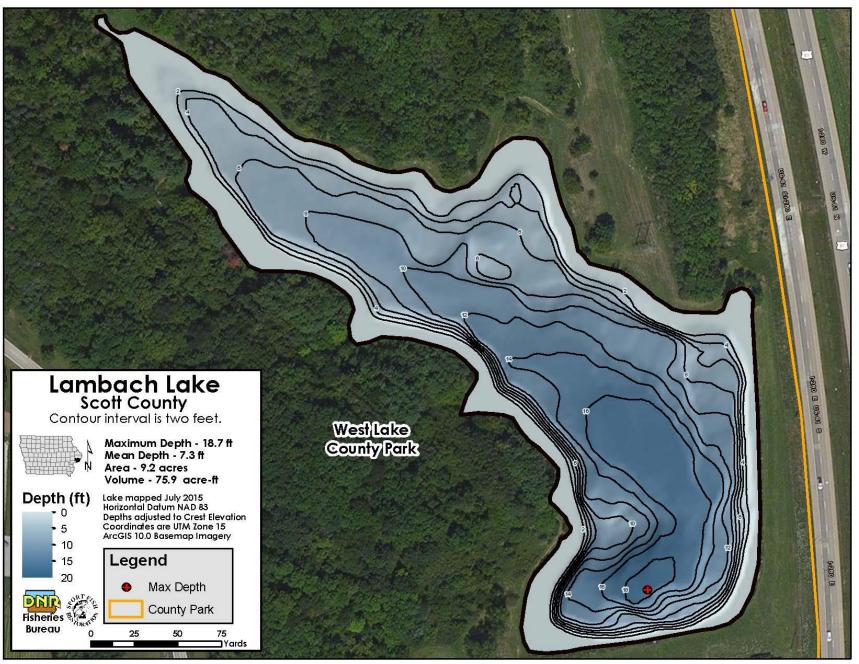
### Figure 3. West Lake Park Complex Bathymetry



#### Figure 4. Lake of the Hills







### Figure 7. Railroad Lake

