Board, Commission or Committee
Application

General Information

Name of Board, Commission or Committee: Boulder City Library Board of Trustees

Applicant Name: James Knowles

Home Address: 1407 Denver St **City** Boulder City **Zip** 89005

Mailing Address: 1407 Denver St **City** Boulder City **Zip** 89005

Home Phone: _____ **Cell Phone:** _____

Work Phone: _____ **Fax:** _____

Email Address: _____

Employer: Bureau of Reclamation **Occupation:** Group Manager

Availability

Please provide the times you are available to serve on this Board/Commission/Council.

I am available for all commitments related to serve on the Boulder City Library Board of Trustees.

Relevant Affiliations

Please list below any other committees you are currently serving on. Please list, if applicable, the jurisdiction and the term of appointment. If you were appointed by an individual and not by a local jurisdiction please include that information.

N/A

Skills and Experience

Please provide a brief description of your qualifications; include any special skills, interests, experience or training which you possess that would benefit the work of this Board, Commission or Council:

I currently attend and am an active participant in the Steering Committee for the Lower Colorado River Multi-Species Conservation Program. I am an employee of the program and in my role as group manager, I attend and participate in all Steering Committee meetings. As a group manager, I manage an annual budget of over $1M and supervise several staff.

For the past two years I have served as a member of the Boulder City Library Board of Trustees. I was elected vice-chair in 2022 and was recently elected chair of the Board of Trustees.

With my experience as a current Board member and my relevant work experience in budget management, finance, and accounting, I feel that I possess the necessary skills to continue serving as a member of the Boulder City Library Board of Trustees.

Please attach a **required** resume/letter of interest.

I certify that the information provided is true and accurate to the bet of my knowledge.

JAMES KNOWLES Digitally signed by JAMES KNOWLES Date: 2023.08.04 07:45:49 -07'00' 8/4/2023

Signature *Date*

You may deliver this application to the Clark County Administrative Services Department, 6th Floor, Clark County Government Center, 500 South Grand Central Parkway, or mail to the following address:

Administrative Services Department – 6th Floor Attn: Agenda Coordinator
P. O. Box 551712, Las Vegas – NV 89155-1712

(This document becomes a public record once it has been received by Clark County.)

James M Knowles
1407 Denver St
Boulder City, NV 89005 United States
Mobile
Email:

Work Experience:

Bureau of Reclamation-Lower Colorado River Multi-Species Conservation Program
PO Box 61470
Boulder City, NV 89006 United States

01/2016 - Present
Adaptive Management Group Manager
Duties, Accomplishments and Related Skills:
SUPERVISION. Supervise a multi-disciplinary team (database administrator, biologist, biometrician) to meet the data management and adaptive management needs of the LCR-MSCP. Direct members of other groups on monitoring and research techniques.

ADAPTIVE MANAGEMENT. Coordinate with management team to develop short- and long-range planning for the LCR MSCP adaptive management program and ensure that LCR MSCP science strategy is being followed.

DATA MANAGEMENT. Supervise Adaptive Management Group on all aspects of data management for the LCR-MSCP including field data collection, database development, and data standardization. Work with members of fisheries and wildlife groups to ensure that their data management needs are being fulfilled.

DATABASE MANAGEMENT SYSTEM. Supervise database administrators on use of DBMS for LCR MSCP data management needs.

REPORT WRITING AND PUBLICATION. Responsible for overseeing the internal and external peer review and revision of reports relating to the research and monitoring of native species and their habitat.

GEOGRAPHIC INFORMATION SYSTEM. Oversee development, implementation, management, and maintenance of LCR MSCP spatial database. Direct group members and Denver Technical Service Center staff on various assignments related to spatial database development.

NATIVE SPECIES and HABITAT. Work with members of fisheries and wildlife groups on development and modification of wildlife and fisheries habitat and population monitoring studies. Collaborate with fisheries and wildlife groups to develop and maintain knowledge of covered species and their habitats and coordinate communication between these groups and members of the Adaptive Management Group.

BUDGET DEVELOPMENT and TRACKING. Develop and track budgets for several projects related to the responsibilities of the Adaptive Management Group.

Bureau of Reclamation-Lower Colorado River Multi-Species Conservation Program
PO Box 61470
Boulder City, NV 89006 United States

04/2015 - Present

Agricultural Engineer/Project Manager
Duties, Accomplishments and Related Skills:
DATA MANAGEMENT. Consulted with the Adaptive Management Group on data standardization issues drawing on my experience working with large natural resource management datasets.

HABITAT MONITORING STUDIES. Initiated a soil moisture monitoring study to evaluate habitat requirements of LCR-MSCP covered species. Led the design including monitoring protocols, planning, acquisition, implementation, management, and analysis phases of the project. Results from the study will be used for making habitat management decisions.

Worked with Adaptive Management Group on use of LiDAR data for vegetation inventory monitoring for created and natural wildlife habitat analysis.

GEOGRAPHIC INFORMATION SYSTEM. Assumed various responsibilities related to LCR-MSCP spatial database and spatial analysis needs that involved coordinating with both the Adaptive Management Group and the Denver Technical Service Center staff. Provided GIS products and services to members of the LCR-MSCP.

RESTORATION PROJECT MANAGEMENT. In addition to the above accomplishments, continue to perform all assigned duties as described below under Agricultural Engineer/Project Manager (GS-0890-11).

Bureau of Reclamation-Lower Colorado River Multi-Species Conservation Program
PO Box 61470
Boulder City, NV 89006 United States

02/2014 - 04/2015
Agricultural Engineer/Project Manager
Duties, Accomplishments and Related Skills:
PROJECT MANAGEMENT. Developed and implemented work plans, budgets, and timelines for project accomplishment. Developed restoration development and monitoring plans for creation of new riparian habitat. Coordinated activities with other work groups within Reclamation and with partners from other federal agencies.

HABITAT MONITORING. Responsible for collection and evaluation of habitat (water quality) monitoring data. Supervised US Fish and Wildlife Service staff to ensure data was collected according to established protocols.

TECHNICAL SERVICES. Provide technical expertise for assigned projects as well as to other members of the restoration group in areas of agricultural engineering, hydrology, forestry, and agronomy.

BUDGET and CONTRACT MANAGEMENT. Developed budgets for assigned projects and tracked expenditures throughout the fiscal year. Administered contracts during all steps of the process from scope of work development to contract award and post-award administration. Supervised several contracts and fulfilled all responsibilities as the Contracting Officer's Representative.

University of Florida-Agricultural & Biological Engineering
2685 State Road 29 N

Immokalee, FL 34142 United States

06/2013 - 02/2014
Senior Engineer and Research Coordinator
Duties, Accomplishments and Related Skills:
In addition to performing the responsibilities of Engineer described below, after being promoted to Senior Engineer, I increased my role in:

PLANNING. Collaborated with principal investigator on short- and long-range planning to meet the needs of the research program and those of the constituent community.

STAFF SUPERVISION AND COORDINATION. Coordinated activities of peer-level staff (grad students and post-doctoral research associates) and supervised field technicians.

DATA MANAGEMENT and ANALYSIS. Responsible for all data management for research program. Coordinated with principal investigator, post-doctoral research associates, and graduate students on data analysis to provide science-based management recommendations.

GEOGRAPHIC INFORMATION SYSTEM MANAGEMENT. Responsible for managing and maintaining research program's spatial data resources.

NATURAL RESOURCE MANAGEMENT. Applied research in the fields of soil science, hydrology, agriculture, and habitat management to make natural resource management recommendations to farmers, land owners, and other resource managers.

RESEARCH and MONITORING PROTOCOLS. Coordinated with program staff on developing and evaluating protocols to ensure they were scientifically sound and able to provide the necessary information for making management decisions.

COORDINATION WITH AGENCY REPRESENTATIVES, COMMUNITY (land owners and managers, extension agents) AND INDUSTRY PARTNERS (scientists, engineers): Cooperate and build COALITIONS with stakeholders in multi-purpose research and demonstration projects related to the unique hydrology of South Florida with a goal of providing solutions for watershed restoration.

BUDGET DEVELOPMENT and TRACKING. Worked with principal investigator to develop budgets for all research projects. Tracked costs throughout the life of each research projects including those with multiple sources of funding.

University of Florida-Agricultural & Biological Engineering
2685 State Road 29 N
Immokalee, FL 34142 United States

06/2005 - 06/2013
Engineer
Duties, Accomplishments and Related Skills:
Integral member of a research team focused on measurement, analysis, and modeling of water resources data for field to watershed solutions in agricultural and natural settings.

PROJECT PROPOSAL AND DESIGN. Participated in all aspects of research project development including proposal writing, research and monitoring protocol development, timeline and scope of work development, and negotiation and interaction with stakeholders.

MONITORING STUDY DESIGN, PLANNING, DEVELOPMENT, IMPLEMENTATION, AND MANAGEMENT. Designed monitoring studies for various research projects involving the installation and maintenance of over 30 monitoring stations for collecting hydrologic and other data. Once in operation, identified problems, troubleshot monitoring stations and improved and corrected systems as needed to ensure data quality. Served as primary point of contact to track accomplishment of on-site activities during the projects.

DEVELOPED DATA COLLECTION GUIDELINES for field staff for over ten monitoring research projects in accordance with Florida Department of Environmental Protection Standard Operating Procedures. Modified guidelines as needed to improve the quality of data collected.

DATA MANAGEMENT, ANALYSIS, INTERPRETATION, AND EVALUATION. Performed Quality Assurance/Quality Control for 30 monitoring stations that collected hydrologic, meteorological, and other data.

Data collected was processed, analyzed and evaluated for interdisciplinary projects to make conclusions regarding the effects of Best Management Practices (BMPs) and other habitat management activities on water quality and water quantity in watersheds involving agricultural and wildlife habitat settings.

Managed research program's SPATIAL DATABASE and generated products to be used for interpretation, analysis and presentation. Developed VBA and python scripts to automate data processing activities.

DATA COLLECTION AND PROCESSING IMPROVEMENT. Identified issues and opportunities for improvement in data collection processes. Implemented systems to streamline data collection and processing tasks with a focus on data quality, data redundancy, and efficiency of data collection.

SUPERVISED FIELD TECHNICIANS for four concurrent research projects that included sample collection (plant tissue, water quality, and soil), water resources data collection, and maintenance of hydrologic monitoring infrastructure.

RESOURCE MANAGEMENT RECOMMENDATIONS AND CONCLUSIONS. Made technical recommendations to land managers based on results from research projects including irrigation management, soil fertility; wetland hydrology/restoration; invasive vegetation control; agricultural stormwater management; and other strategies to reduce environmental impacts from resource use activities.

REPORT WRITING, PRESENTATIONS AND PUBLICATION PREPARATION. Authored technical reports, co-wrote scientific publications, and made oral presentations to present results from scientific research and demonstration projects. Reports provided agency representatives, land managers, and other stakeholders with information and recommendations for land management that resulted from projects regarding water quality/quantity in watersheds of southern Florida.

KEY ACCOMPLISHMENTS of these projects included optimization of crop water use, water quality improvement to restore proper functioning of downstream waterbodies, restoration of isolated wetlands in ranchlands including habitat protection enhancement, and implementation of BMPs to reduce nutrient discharges.

United States Peace Corps
Cochabamba
Cochabamba, Bolivia

07/2002 - 12/2003
Natural Resources Technical Coordinator
Duties, Accomplishments and Related Skills:
Responsible for serving as the primary support person and technical advisor to the Natural Resources/Environmental Education Project Director.

PROJECT DATA COLLECTION AND ANALYSIS for the natural resources project including reviewing, analyzing and compiling data from Quarterly Progress Reports. Projects were related to a range of natural resource management and protection issues including native tree nurseries and plantings, environmental education, erosion prevention, soil improvement, and irrigation efficiency.

REPORT WRITING AND DEVELOPMENT OF TECHNICAL MONITORING PLANS. Prepared annual Project Status Reports for the U.S. Peace Corps office in Washington. Translated the feedback from Project Status Reports into development of new project plans.

PROVIDED TECHNICAL SUPPORT AND DELIVERED TECHNICAL TRAINING SESSIONS to Volunteers related to project planning and implementation for watershed rehabilitation and natural resource management.

GRANT AND PROJECT PROPOSAL WRITING. Assisted over 15 Volunteers in the preparation and submission of funding proposals to NGO's, federal agencies, universities, religious groups, and local governments.

COALITION BUILDING. Assisted Volunteers and the Project Director in building and maintaining coalitions with a diverse group of stakeholders including NGO's, federal agencies, universities, religious groups, and local governments.

Education:

University of Florida Gainesville, FL United States
Master's degree 5 /2000
GPA: 3.91 of a maximum 4
Credits Earned: 39 Semester Hours
Major: Forest Resources and Conservation **Minor:** Agroforestry
Relevant Coursework, Licenses and Certifications:
Principles of Crop Science, General Soils, Soil Chemistry
Agroforestry, Forest Productivity and Health, Tropical Forestry
Foundations of GIS, Agricultural Decision Support Systems, GPS for Planners
Statistical Methods of Research

University of Florida Gainesville, FL United States
Bachelor's degree 5 /1997
GPA: 3.43 of a maximum 4
Credits Earned: 140 Semester Hours
Major: Environmental Engineering **Honors:** Cum Laude
Relevant Coursework, Licenses and Certifications:
Calculus (1, 2, 3), Physics (1 and 2), Differential Equations
Chemistry, Organic Chemistry, Introduction to Water Chemistry
Engineering Mechanics (Statics and Dynamics), Thermodynamics, Hydrodynamics
Computer Programming for Engineers (C++), Computer Assisted Drafting/Design
Computational Methods of Environmental Engineering
Water/Wastewater Treatment Design, Wastewater System Design

Environmental Hydrology
Environmental Biology
Hydraulic System Design
Environmental Resource Management

Job Related Training:

FAC-COR Level II Certification (Expires February 25, 2018)

Language Skills:

Language	Spoken	Written	Read
Quechua	Novice	Novice	Novice
Spanish	Advanced	Advanced	Advanced
Catalan	Novice	Novice	Intermediate

Affiliations:

Boy Scouts of America - EAGLE SCOUT and Vigil Honor Member (Order of the Arrow)

Professional Publications:

Hendricks, G., S. Shukla, Z. Helsel, J.M. Knowles, and R. Gilbert. 2012. Water Aspect of Three Biofuel Crops in Florida. ASABE Annual International Meeting. Dallas, Texas. July 29 - August 1.

Shukla, S., D. Goswami, W.D. Graham, A.W. Hodges, M.C. Christman, and J.M. Knowles. 2011. Water quality effectiveness of ditch fencing and culvert crossing in the Lake Okeechobee Basin, Southern Florida, USA. Ecological Engineering 37: 1158-1163. 10.1016/j.ecoleng.2011.02.013.

Shukla, A., S. Shukla, and J.M. Knowles. 2011. Environmental services from agricultural stormwater detention systems in Florida. American Geophysical Union, Fall Meeting 2011, San Francisco, California. December 5-9.

Wu, C., S. Shukla, and J.M. Knowles. 2011. Evapotranspiration from ranchland wetlands in the Everglades watershed. American Geophysical Union, Fall Meeting 2011, San Francisco, California. December 5-9.

Wu, C.L., S. Shukla, J.M. Knowles, A. Swancar, and W.D. Graham. 2010. Quantification of Evapotranspiration from Isolated Wetland in the Lake Okeechobee Basin. ASABE Annual International Meeting. Pittsburgh, Pennsylvania. June 20-23.

Goswami, D., S. Shukla, J.M. Knowles, and W.D. Graham. 2009. Effects of Water Retention on Nitrogen and Phosphorus Loadings from Two Drained Wetlands in the Lake Okeechobee Basin. ASABE Annual International Meeting, Reno, Nevada. June 21-24.

Goswami, D., S. Shukla, W.D. Graham, and J.M. Knowles. 2008. Evaluation of ranchland best management practices for phosphorus discharge in Lake Okeechobee. 1st Sustainable Water Resources symposium, University of Florida Water Institute, Gainesville, FL. Feb. 27-28.

Shukla, S., D. Goswami, J.M. Knowles, and W.D. Graham. 2008. Effects of Wetland Hydrologic Restoration on Nitrogen and Phosphorus Discharges in the Lake Okeechobee Basin. ASABE Annual International Meeting, Providence, Rhode Island. June 29 - July 02.

Hendricks, G.S., S. Shukla, J.M. Knowles, R.C. Littell, T.A. Obreza, and K.E. Cushman. 2008. Evaluation of Vegetable BMPs with Regards to Groundwater Quality in South Florida. ASABE Annual International Meeting. Providence, Rhode Island. June 29 - July 2.

Knowles, J.M., and P.K.R. Nair. 2000. Computer-Based Data Management Technologies in Agroforestry: Problems and Prospects. XXI IUFRO World Congress, Kuala Lumpur, Malaysia. August 7-12.

Knowles, J.M., E.A. Ellis, and P.K.R. Nair. 1999. Computer-Based Data Management and Decision Support Systems in Agroforestry. 6th North American Agroforestry Conference, Hot Springs, Arkansas. June 12-16.