

NOTICE

Please note that this bid from Pinnacle Actuarial Resources, Inc. for DEP17*20 was received at the Purchasing Division office prior to the established bid opening date and time on April 13, 2017 as noted on the coversheet of the electronic bid, but did not load properly at the public bid opening. This bid has since been loaded and is now posted.

A handwritten signature in cursive script, reading "Diane Holley-Brown", is written over a horizontal line.

Diane Holley-Brown
Assistant Purchasing Director



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header @ 2

[List View](#)

General Information

[Contact](#)

[Default Values](#)

[Discount](#)

[Document Information](#)

Procurement Folder: 299626

SO Doc Code: CRFQ

Procurement Type: Central Contract - Fixed Amt

SO Dept: 0313

Vendor ID: 000000102966

SO Doc ID: DEP1700000020

Legal Name: PINNACLE ACTUARIAL RESOURCES INC

Published Date: 4/11/17

Alias/DBA:

Close Date: 4/13/17

Total Bid: \$82,000.00

Close Time: 13:30

Response Date: 04/13/2017

Status: Closed

Response Time: 12:06

Solicitation Description: Addendum No.01 - Actuarial Consulting Services for DEP

Total of Header Attachments: 2

Total of All Attachments: 2



Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder : 299626

Solicitation Description : Addendum No.01 - Actuarial Consulting Services for DEP

Proc Type : Central Contract - Fixed Amt

Date issued	Solicitation Closes	Solicitation Response	Version
	2017-04-13 13:30:00	SR 0313 ESR04131700000004970	1

VENDOR

000000102966

PINNACLE ACTUARIAL RESOURCES INC

Solicitation Number: CRFQ 0313 DEP1700000020

Total Bid : \$82,000.00 Response Date: 2017-04-13 Response Time: 12:06:42

Comments:

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers
(304) 558-0246
jessica.s.chambers@wv.gov

Signature on File

FEIN #

DATE

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Actuarial consulting services				\$82,000.00

Comm Code	Manufacturer	Specification	Model #
80101512			

Extended Description :	Actuarial consulting services for the WVDEP Office of Special Reclamation
------------------------	---

**A Proposal to Serve the
State of West Virginia
Department of Environmental Protection
Office of Special Reclamation
RFQ DEP1700000020
Technical Proposal**

April 2017



3109 Cornelius Drive
Bloomington, IL 61704
309.807.2300
pinnacleactuaries.com

Commitment Beyond Numbers

Joseph A. Herbers, ACAS, MAAA, CERA
Managing Principal
jherbers@pinnacleactuaries.com

April 13, 2017

Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130
Attention: Ms. Beth Collins

RE: West Virginia Department of Environmental Protection, Office of Special Reclamation
RFQ DEP1700000020

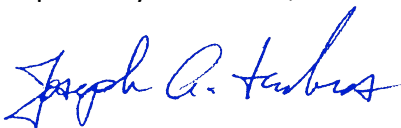
Dear Ms. Chambers:

On behalf of Pinnacle Actuarial Resources, Inc., I am pleased to offer our proposal to provide the requested actuarial services to West Virginia Department of Environmental Protection's Office of Special Reclamation (Agency). We trust that you will find it in accordance with your Request for Quotation.

As Pinnacle's Managing Principal, I am empowered to bind the company to this proposal. The attached proposal is "a firm and irrevocable offer" for 120 days or as long as necessary to finalize contract details.

Please feel free to contact me or Contract Manager, John Wade, to discuss any issues or concerns or if additional information is needed. Mr. Wade's contact information can be found within the attached response.

Respectfully submitted,



Joseph A. Herbers, ACAS, MAAA, CERA
Managing Principal
309.807.2300
Enclosures

TABLE OF CONTENTS

1.	SPECIAL RECLAMATION FUNDS BACKGROUND.....	1
2.	PINNACLE OVERVIEW	2
3.	QUALIFICATIONS.....	3
4.	MANDATORY REQUIREMENTS.....	7
5.	MISCELLANEOUS ITEMS.....	9

APPENDICES

- A. Sample Reports (to be provided upon request)
 - A.1 Ohio Mine Reclamation Forfeiture Fund 2015
 - A.2 West Virginia Special Reclamation Fund and Special Reclamation Water Trust Fund
- B. Credentialing Memberships
 - B.1 CAS Membership
 - B.2 AAA Membership
 - B.3 Continuing Education
- C. Biographies and Curriculum Vitae
- D. Peer Review Procedures
- E. Sample Client List
- F. Business Registration Certificate
- G. WV Tax Department Statement of Good Standing
- H. Insurance Certificate
- I. Vendor Preference Certificate
- J. Purchasing Affidavit
- K. RFQ DEP1500000090 – Solicitation Cover Page
- L. Certification and Signature Page
- M. Addendum Acknowledgement Form
- N. Client References (to be provided upon request)

1. SPECIAL RECLAMATION FUNDS BACKGROUND

The Special Reclamation Fund and the Special Reclamation Water Trust Fund (collectively referred to as the Funds) are both programs within the West Virginia Department of Environmental Protection (DEP) designed to provide funding if necessary to reclaim and restore land and/or water sites. The programs are funded through coal taxes, investment income, and other minor, miscellaneous sources of income. The Funds' objectives are to have systems that allow for maximum flexibility in a dynamic environmental restorations and protection program and to achieve greater cost savings and budget predictability.

The DEP seeks actuarial services in connection with the review of the programs' fiscal soundness. The review is to include an evaluation of the present and prospective assets and liabilities of the Special Reclamation Program (the special reclamation fund and the water trust fund).

2. *PINNACLE ACTUARIAL RESOURCES, INC. OVERVIEW*

Pinnacle Actuarial Resources, Inc. (Pinnacle) is one of the larger property/casualty actuarial consulting firms in the U.S. whose specialties include loss reserving, insurance pricing, alternative markets and financial risk modeling. Our clients include insurance companies, state regulators and state-operated funds, insurance trade organizations, captive insurers, self-insured businesses, accounting firms and a variety of risk retention groups. As a result of this broad client base, we are called on to provide a wide variety of actuarial consulting services.

Pinnacle Actuarial Resources, Inc. is an independent Illinois corporation, privately owned by its professional actuarial staff. Pinnacle took its current corporate form on January 1, 2003, but our core operations and many of our customer relationships have been maintained continuously since 1984.

Our actuaries have provided loss reserve (unpaid liability) analyses, pricing and funding studies for commercial insurers, state-operated funds self-insured entities and captives. We serve as appointed actuaries and provide public Statements of Actuarial Opinion for a number of insurers in accordance with NAIC Annual Statement instructions and the Actuarial Standards of Practice.

Also included among our practice specialties is the costing of proposed legislation. In this regard, we have performed costing studies of insurance legislation in California, Colorado, Florida, Hawaii, Louisiana, Maryland, New Jersey, New York, Pennsylvania, Texas and West Virginia.

Our staff includes eighteen Fellows of the Casualty Actuarial Society and ten Associates of the Casualty Actuarial Society. All twenty-eight credentialed actuaries are members of the American Academy of Actuaries. Biographies for staff members for this project are included with this proposal.

For more information concerning our firm and all the services we provide, please visit our web site at www.pinnacleactuaries.com.

3. *Qualifications*

A summary of Pinnacle's ability to meet the minimum qualification requirements, as set out in section 3 of the RFQ, immediately follows.

3.1 Licensure

All of our credentialed actuaries are members of the American Academy of Actuaries (AAA) and the Casualty Actuarial Society (CAS).

Laura Maxwell will be responsible for the Peer Review of the project which includes assurance of compliance with the specifications/scope of service of the engagement, as well as adherence to professional standards of the CAS, AAA, and Pinnacle. Laura will also oversee the development of Pinnacle's project plan and adherence to the plan throughout the engagement. She has prior experience with the mine reclamation programs in Kentucky, Ohio, Virginia and West Virginia. She served as the peer reviewer and co-author of Pinnacle's 2013 report to the Special Reclamation Advisory Council. Laura is also a peer reviewer of our reports to the Ohio Department of Natural Resources, regarding our evaluation of their mine reclamation program. She has also assisted in our review of the mine reclamations program in Kentucky. Laura is a Fellow of the Casualty Actuarial Society, Member of the American Academy of Actuaries, and meets the continuing education requirements of both organizations.

Art Randolph will provide analysis on the project, reporting directly to Ms. Maxwell. He has prior experience with the mine reclamation program in Kentucky, co-authoring our 2012 and 2013 reports to the state. Art serves as the account executive in our current engagement with the Kentucky Reclamation Guaranty Fund. Art is a Fellow of the Casualty Actuarial Society, Member of the American Academy of Actuaries, and meets the continuing education requirements of both organizations.

John Wade, who has worked on each of our prior West Virginia mine reclamation studies as well similar studies in Kentucky, Ohio, and Virginia, will provide analysis and assistance with project work flow. He serves as the account executive in our current engagement with the Ohio Department of Natural Resources as relates to their Reclamation Forfeiture Fund. John will report directly to Ms. Maxwell. John is an Associate of the Casualty Actuarial Society, Member of the American Academy of Actuaries, and meets the continuing education requirements of both organizations.

3.1.1 Credentials

Documentation of our actuarial credentials is included as Appendix B.1 and B.2.

3.1.2 Continuing Education

Documentation of our continuing education compliance is included as Appendix B.3

3.2 Conflict of Interest

We have reviewed our current and past work for the state of West Virginia and have found no conflict of interest. Our policy regarding possible conflict of interest is listed below.

Before responding to any RFP the consultant must first determine that no potential conflict of interest, or no appearance of conflict of interest, exists. At Pinnacle our conflict check covers past, current and future client relationships.

A conflict of interest may exist on two levels:

- i) A conflict of interest exists if Pinnacle, or the account executive, has any financial interest which may limit the consultant's ability to render an objective, professional opinion.
- ii) A conflict exists if working for one client harms our ability to do business with another client.

In most cases, if the work is more than three years old that should remove concerns about potential conflicts of interest.

The "business" conflict in (ii) typically arises when a client demands that Pinnacle not do business with one of the client's competitors. This should not be a conflict we would face in any work done for the West Virginia DEP.

The "professional" conflict of interest in (i) is the more common situation and the one to which references of "conflict of interest" usually applies. The key in determining the existence of a conflict is the ability of the consultant and Pinnacle to render an objective opinion.

Our consultant base is large enough to exclude any consultant from the team of consultants that might be reviewing a specific company and still provide an efficient, professional, and comprehensive work product. However, we do and will continue to check with the Client on any potential conflicts before accepting an assignment where the potential for conflict exists.

It can be specifically noted that Ms. Maxwell and Mr. Wade both have been and are currently actively engaged by the West Virginia Offices of the Insurance Commissioner (OIC) in annual

actuarial reviews of workers compensation funds managed by the State. The engagement with the OIC does not present itself as a conflict of interest with the services to be provided under this proposal.

We have endeavored to determine the existence of any potential conflict of interests which may exist that would impair our ability, or perceived ability, to render objective actuarial services. We have identified no conflict of interest with regard to any officer or employee of the organizations involved in this assignment. Specifically, none of the consultants and other staff that would be assigned to this engagement have a conflict of interest with the State, their current leadership or their senior staff members.

3.3 External Quality Control

Pinnacle does not have an external quality control report.

Pinnacle utilizes the internal audit procedures of peer review. A brief summary of Pinnacle's peer review procedure immediately follows. Our peer review policy is included at the end of this proposal as Appendix D.

The primary purpose of peer review is to maximize the quality and comprehension of our work product, and to minimize our own professional liability exposure within practical time and fee constraints.

The interest of the firm's clients, and those of the firm itself, mandate that work performed by the firm, and the communication of that work by the firm, conform to high professional standards. Appropriate recognition of such interests deserves and requires adoption of and compliance with certain internal standards and procedures regarding work performance and communication of the work product, the objectives of such standards and procedures being to attempt to determine, to the extent practicable, that:

- methods and assumptions employed are appropriate and acceptable in the circumstances;
- judgments made and applied are reasonable and supportable;
- communications to clients are accurate, complete and understandable; and
- work performed adequately supports all statements and conclusions.

A system of peer review is the tool we use to exercise due care and diligence such that these objectives are achieved.

File documentation is an important element of peer review. The file must maintain an adequate trail which minimizes the risk of an undocumented or unsupported work product when viewed from the perspective of an independent third party. Pinnacle conducts random audits of client files to determine adherence with file documentation.

The peer review system is intended to foster the maintenance of high professional standards and practices, consistently applied to Pinnacle Actuarial Resources, Inc (the Firm's) assignments. Thus, the review should not be considered perfunctory, even in cases of the most routine or straightforward assignments.

It will be the express duty of the Professional Standards Officer (PSO) to ensure the work product of the firm abides by these guidelines.

3.4 Federal or State Reviews

Pinnacle has not been subject to any federal or state desk reviews or field reviews in the past three years.

3.5 Litigation

Pinnacle has not been subject to any litigation, taken or pending, in the past three years with any government regulatory bodies or professional organizations.

3.6 Client References

Pinnacle has provided actuarial studies related to mine reclamation liabilities to West Virginia and other states. Contacts with the West Virginia DEP include Michael Sheehan and Tom McCarthy. Contact information for other State programs (Ohio, Kentucky, and Virginia) will be provided upon request.

3.7 Sample Reports

Upon request we will provide three sample actuarial valuation reports as Appendix A to this proposal. We have included the first three pages of past mine reclamation reports for your initial reference.

Ohio Mine Reclamation Forfeiture Fund

West Virginia Special Reclamation Fund and Special Reclamation Water Trust Fund

4. MANDATORY REQUIREMENTS

Pinnacle will provide actuarial services that will meet or exceed the mandatory requirements listed below.

4.1.1 Timeline and Deliverables

The following dates will be met:

❖ Upon Receipt of Contract	Work Commences
❖ June 15, 2017	Progress Report
❖ August 15, 2017	Progress Report
❖ October 15, 2017	Draft Report
❖ November 15, 2017	Exit Conference
❖ November 30, 2017	Delivery of Final Report

4.1.2 Report and Statement of Actuarial Opinion

We reiterate here key components of the Report and Statement of Actuarial Opinion as listed in section 4.1.2 of the RFQ to indicate our understanding and acceptance of the required services. Pinnacle will prepare a report with a statement of actuarial opinion as to the Program's fiscal soundness, in accordance with West Virginia Code §22-1-17. The report and opinion will include the following items:

1. A valuation in accordance with applicable actuarial standards of practice promulgated by the actuarial standards board of American Academy of Actuaries that will determine the Program's fiscal soundness;
2. An evaluation of the **present** (June 30, 2017) assets and liabilities of the Special Reclamation Program for a minimum of 20 years, including an annual table illustrating those assets and liabilities for underground versus surface mine permits, small versus large permits (based on bond amounts or acreage) and permits for tipples, preparation plants and impoundments and illustrating land and water liabilities separately;
3. An evaluation of the **prospective** assets and liabilities of the Special Reclamation Program for a minimum of 20 years, including a table illustrating estimates of underground versus surface mine permits, small versus large permits (based on bond amounts or acreage) and permits for tipples, preparation plants and impoundments and illustrating land and water liabilities separately, including the funded status of the water trust fund as well as the special reclamation fund;

4. A table combining the present and prospective findings of items 4.1.2.2 and 4.1.2.3;
5. An analysis and discussion of the ability of the Program to support long term and/or perpetual liabilities;
6. A one page executive summary of conclusion written in plain English with references to the body of the report;
7. An electronic copy of the final report in Microsoft Word 2010 or comparable format;
8. An electronic copy of work papers, table and models in Microsoft Excel 2010 or comparable format.

4.1.3 On-Site Entrance Conference

Pinnacle will participate in an on-site entrance conference involving interviews of each Special Reclamation Advisory Council member and other significant staff.

4.1.4 On-Site Entrance Conference

Pinnacle will provide two (2) on-site consultations, which may include presentation at quarterly Council meetings or presentations to the Legislature, in addition to the entrance and exit conferences.

4.1.5 Teleconference

Pinnacle will provide one (1) teleconference with the Special Reclamation Advisory Council and significant staff.

4.1.6 Exit Conference

Pinnacle will provide an on-site exit conference with the Special Reclamation Advisory Council and significant staff.

Payment Schedule, Travel Expenses, and Facilities Access

Pinnacle recognizes and accepts the Payment Schedule as listed in section 7.1 of the RFQ.

Pinnacle further acknowledges that Travel Costs are inclusive in the Pricing Page and will not bill these costs separately to the Agency. We will also comply with all Facilities Access requirements.

5. MISCELLANEOUS ITEMS

Specific Work Plan

In completing the elements of Section 4 above, the following Specific Work Plan will be adopted:

- Review of previous actuarial reports and all other presently available information concerning the present assets and liabilities of the Special Reclamation Fund and the Special Reclamation Water Trust Fund, expected future assets and liabilities of the Funds, and all other information related to the timing of fund deposits/collections and fund reclamation payments.
- On-site Entrance Conference – On-site meeting in Charleston to gain insight as to background, operations and significance of obtained data.
- Data Request – Immediately following the on-site entrance conference, Pinnacle will issue a formal data request outlining all additional required elements to support our study.
- Data Assimilation – Pinnacle will organize and assimilate available data into electronic worksheets for technical analysis
- Analysis
 - Observations of historical financial data
 - Review of structure of the Funds
 - Selection of appropriate methods and assumptions
 - Incorporation of Business Plan
- Results
 - Preliminary results
 - Diagnostics and fine-tuning
 - Finalization of range
 - Follow-Up with DEP and Special Reclamation Advisory Council
- Development of Report
 - Draft and Discussion
 - Final Report
- On-site exit conference and presentation to Special Reclamation Advisory Council in Charleston.
- Two Additional Onsite Consultations and One Teleconference which may include presentations at quarterly Council meetings or presentations to the West Virginia Legislature will be worked into the above project plan.

Assurance of Quality of Staff

We have assigned three highly qualified experienced consulting actuaries to this engagement team. These three individuals have worked closely together on numerous projects, including mine reclamation studies. Each of these consultants are qualified, able, and available to step in and fill the role of any other one of the consultants on the project team should one of the consultants become unavailable for any reason. We also have a pool of additional consulting actuaries that we could call upon, if needed. No changes would be made to the professional staff assigned to this team without the prior written consent of the Department of Environmental Protection. Finally it can also be noted that our lead supporting analyst on this engagement will be the same analyst used in our prior West Virginia mine reclamation studies, as well as in our studies of our other State mine reclamation programs.

General Terms and Conditions

Pinnacle agrees with the General Terms and Conditions as listed in the RFQ. Specifically, we currently maintain professional liability insurance in the amount of \$2,000,000 and agree to maintain the professional liability insurance. We also reaffirm that our managing actuary for this assignment, Laura Maxwell is a Fellow of the Casualty Actuarial Society, a member of the American Academy of Actuaries, and has the necessary experience to see this engagement is completed as specified.

Prior Engagements with the State of West Virginia

Pinnacle has provided the three of the prior actuarial studies of the Special Reclamation Fund and the Special Reclamation Water Trust Fund for the West Virginia Department of Environmental Protection.

Pinnacle is currently engaged by the State of West Virginia, Department of Revenue, Offices of the Insurance Commissioner (OIC) to provide actuarial services in relation to the review of the remaining workers' compensation liabilities from coverage provided by the state run workers' compensation funds until 2005 and the successor funds created to supplement the private insurance market. Most recently the State has added their own State Entities Workers Compensation (SEWC) self-insurance fund into the mix. Pinnacle provided the original feasibility study for the SEWC and assists in the subsequent evaluations of the financial soundness of this and the other workers compensation funds. The annual contract for the OIC began in 2009 and has been extended/renewed through 2018. This engagement is currently being led by John Wade and Laura Maxwell.

Contract Manager

Per section 11.1 of the RFQ, during the course of this engagement, John Wade will serve as the primary contract manager responsible for overseeing Pinnacle's responsibilities under the contract. Laura Maxwell is available as an alternate contact point.

	Primary Contact	Alternate Contact
Contract Manager	John Wade	Laura Maxwell
Telephone Number	317.889.4760	415.692.0938
Fax Number	309.807.2301	309.807.2301
Email Address	JWade@PinnacleActuaries.com	LMaxwell@PinnacleActuaries.com

RFQ DEP1700000020

Appendix A – Sample Reports

(to be provided upon request



70 East Main Street, Suite F
Greenwood, IN 46143
317.889.5760
pinnacleactuarial.com

John Wade, ACAS, MAAA
Senior Consulting Actuary
jwade@pinnacleactuarial.com

June 29, 2015

Mr. Michael Sliva
Chair – Ohio Reclamation Forfeiture Advisory Board
2045 Morse Road, Building H-3
Columbus, Ohio 43229-6693

Dear Chairman Sliva:

Attached is our report documenting our analysis of the financial soundness of Ohio's Reclamation Forfeiture Fund. This report represents the combined efforts contributed by the Ohio Reclamation Forfeiture Advisory Board, the Ohio Department of Natural Resources – Division of Mineral Resources Management, and Pinnacle Actuarial Resources.

It is a pleasure working with you on this study. Please feel free to contact anyone from the engagement team should you have any questions.

Best regards,

A handwritten signature in blue ink that reads "John E. Wade". The signature is fluid and cursive, with the first letters of each word being capitalized and prominent.

John E. Wade, ACAS, MAAA
Senior Consulting Actuary
jwade@pinnacleactuarial.com

Enclosure

cc: Lanny Erdos, Chief ODNR-DMRM



Analysis of the RECLAMATION FORFEITURE FUND

Oversight by the
Reclamation Forfeiture Fund Advisory Board of Ohio

Maintained by the
Ohio Department of Natural Resources
Division of Mineral Resources Management

Issued June 29, 2015



70 East Main Street, Suite F
Greenwood, IN 46143
317.889.5760
pinnacleactuaries.com

Table of Contents

Section	Page
<i>Purpose</i>	<i>1</i>
<i>Qualification to Provide Actuarial Report</i>	<i>1</i>
<i>Distribution and Use</i>	<i>1</i>
<i>Reliances and Limitations</i>	<i>2</i>
<i>Executive Summary</i>	<i>3</i>
<i>Summary of Findings</i>	<i>7</i>
<i>Ohio Reclamation Forfeiture Fund Background</i>	<i>9</i>
<i>Changes in the Data since Previous Report</i>	<i>11</i>
<i>Historical Forfeitures</i>	<i>12</i>
<i>Analysis Overview and General Comments</i>	<i>15</i>
<i>Actuarial Analysis</i>	<i>19</i>
<i>Long-Term Water Treatment and Alternative Water Supply</i>	<i>29</i>
<i>Financial Capacity of the Fund</i>	<i>31</i>

Exhibits



70 East Main Street, Suite F
Greenwood, IN 46143
O: 317.889.5760
pinnacleactuarial.com

John E. Wade, ACAS, MAAA
Senior Consulting Actuary
jwade@pinnacleactuarial.com

December 26, 2013

Special Reclamation Advisory Council
c/o Department of Environmental Protection
Division of Land Restoration – Office of Special Reclamation
601 57th Street S.E.
Charleston, West Virginia 25304

Dear Council Members:

Pinnacle Actuarial Resources, Inc is pleased to provide the enclosed final report to the Special Reclamation Advisory Council of the West Virginia Department of Environmental Protection. The report provides summary and various details regarding the actuarial valuation of the Special Reclamation Fund and the Special Reclamation Water Trust Fund as of June 30, 2013.

If you have any questions, or require anything further please call us at the numbers listed below. Thank you for allowing us to be of service to the Council again this year. We look forward to the opportunity to work with you again in the near future.

Best Regards,

A handwritten signature in blue ink that reads "John E. Wade".

John E. Wade, ACAS, MAAA
Senior Consulting Actuary
jwade@pinnacleactuarial.com
317-889-5760

A handwritten signature in blue ink that reads "Laura A. Maxwell".

Laura A. Maxwell, FCAS, MAAA
Consulting Actuary
lm Maxwell@pinnacleactuarial.com
415-692-0938



**Report for the
West Virginia Department of Environmental Protection
Office of Special Reclamation**

**Actuarial Valuation of the
Special Reclamation Fund &
Special Reclamation Water Trust Fund**

Actuarial Analysis as of June 30, 2013



70 East Main Street, Suite F
Greenwood, IN 46143
O: 317.889.5760
pinnacleactuaries.com

REPORT ORGANIZATION

Page 2 - EXECUTIVE SUMMARY provides a thumbnail sketch of the results of our analysis.

Page 12 - ACTUARIAL CERTIFICATION attests that this valuation has been conducted in accordance with generally accepted actuarial principles and practices.

Page 13 - SECTION 1 describes the actuarial model in detail and the development of the assumptions used to estimate the revenues and liabilities of the Special Reclamation Fund and the Special Reclamation Water Trust Fund.

Page 23 - SECTION 2 provides a projection of required income for solvency through fiscal year 2048.

Page 24 - SECTION 3 describes the data reviewed and used in the report.

Page 29 - SECTION 4 describes the actuarial assumptions used in the valuation.

Starting after page 32,

“EXHIBITS” have been included as a separate section of the report. There are three types of exhibits included with this report. In order of appearance, exhibits labeled as “Table” duplicate the Tables contained within the body of this report. Exhibits labeled as “Exhibit” provide additional information that clarify the development of our estimates. Exhibits labeled as “Appendix” provide the actuarial forfeiture and release triangles pivotal in our selection of those parameters, as well as additional report items of interest to the Department of Environmental Protection (projected tax rate to maintain a positive fund balance 35 years from now).

The timely completion of our report depended on complete responses to our data and information requests. The Department of Environmental Protection staff provided us with timely and complete responses to all of our requests for information. We wish to thank them, especially Michael Sheehan, Lewis Halstead, Tom McCarthy, Jean Sheppard, Jennifer Paxton, and Patty Hickman for their time and for providing us with their counsel as well as the information that we used in this report.

RFQ DEP1700000020

Appendix B – Credentialing Memberships



ACTUARY DIRECTORY SEARCH RESULT

[« Conduct a New Search](#)

Name	Title	Company	City	State	Country
Nicholas E. Alicea, ACAS	Associate Actuary	Pinnacle Actuarial Resources, Inc.	Atlanta	GA	UNITED STATES
Mr. Erich A. Brandt, FCAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Ms. Linda K. Brobeck, FCAS		Pinnacle Actuarial Resources, Inc.	Emerald Hills	CA	UNITED STATES
Zachary T. Brogadir, FCAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Chicago	IL	UNITED STATES
Michael Keryu Chen, FCAS		Pinnacle Actuarial Resources, Inc.	West Des Moines	IA	UNITED STATES
Dr. Zach Espe Dietz, ACAS	Actuarial Analyst	Pinnacle Actuarial Resources, Inc.	Rochester	NY	UNITED STATES
Gregory W. Fears, Jr., ACAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Mr. Derek W. Freihaut, FCAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Ms. Legare W. Gresham, FCAS		Pinnacle Actuarial Resources, Inc.			
Nicholas Gurgone, ACAS	Actuarial Analyst	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Mr. Aaron G. Haning, ACAS	Associate Actuary	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Mr. Joseph A. Herbers, ACAS, CERA	Managing Principal	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Mr. Aaron Nicholas Hillebrandt, FCAS		Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Mr. Christopher M. Holt, ACAS		Pinnacle Actuarial Resources, Inc.	Atlanta	GA	UNITED STATES
Thomas R. Kolde, FCAS		Pinnacle Actuarial Resources, Inc.			
Ms. Jing Liu, FCAS		Pinnacle Actuarial Resources, Inc.			
Laura A. Maxwell, FCAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	San Ramon	CA	UNITED STATES
Mr. Timothy C. Mosler, FCAS		Pinnacle Actuarial Resources, Inc.	Atlanta	GA	UNITED STATES
Mr. Roosevelt C. Mosley, FCAS	Principal & Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Brett A. Parmenter, FCAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Chicago	IL	UNITED STATES
Mr. Arthur R. Randolph, FCAS	Principal & Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Atlanta	GA	UNITED STATES
Darcie R. Truttmann, ACAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Mr. John E. Wade, ACAS	Consultant	Pinnacle Actuarial Resources, Inc.	Greenwood	IN	UNITED STATES
Ms. Kathryn Ann Walker, FCAS		Pinnacle Actuarial Resources, Inc.	Chicago	IL	UNITED STATES
Mr. Robert J. Walling, FCAS	Principal & Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Mr. Gary C. Wang, FCAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Bloomington	IL	UNITED STATES
Ms. Radost Roumenova Wenman, FCAS	Consulting Actuary	Pinnacle Actuarial Resources, Inc.	Belmont	CA	UNITED STATES
Mr. Terrence Wright, ACAS		Pinnacle Actuarial Resources, Inc.	Atlanta	GA	UNITED STATES

[Terms of Use](#)

Links to Actuarial Organizations:
[Society of Actuaries](#)
[American Academy of Actuaries](#)
[American Society of Pension Professionals & Actuaries](#)
[Canadian Institute of Actuaries](#)
[Casualty Actuarial Society](#)
[Conference of Consulting Actuaries](#)
[The Actuarial Foundation](#)
<http://www.beanactuary.org/>
[Links to Other Sites](#)
Search the Directory

Given / First Name:	<input type="text"/>	Family / Last Name:	<input type="text"/>
Job Title:	<input type="text"/>	Organization:	<input type="text" value="Pinnacle Actuarial"/>
City:	<input type="text"/>	State/Province:	<input type="text"/>
Country:	<input type="text" value="- Select -"/>	Zip/Postal:	<input type="text"/>
Phone:	<input type="text"/>		

SHIFT-click or CONTROL-click to select multiple

Professional Designations	<input type="text" value="SOA:ASA"/> <input type="text" value="SOA:CERA"/> <input type="text" value="SOA:FSA"/> <input type="text" value="AAA:MAAA"/>
Academic Degrees	<input type="text" value="A.A."/> <input type="text" value="A.A.S."/> <input type="text" value="A.B."/> <input type="text" value="A.B.A."/>
Other Professional Designations	<input type="text" value="Six Sigma Black Belt"/> <input type="text" value="Six Sigma Green Belt"/> <input type="text" value="Six Sigma Master Black Belt"/> <input type="text" value="Six Sigma Yellow Belt"/>
Industry	<input type="text" value="<Please Select>"/>
Primary Area of Practice	<input type="text" value="<Please Select>"/>
Specializations	<input type="text" value="Academic/Education"/> <input type="text" value="Annuities"/> <input type="text" value="Audit"/> <input type="text" value="Capital Management"/>
Society of Actuaries Section	<input type="text" value="Actuary of the Future"/> <input type="text" value="Education & Research"/> <input type="text" value="Entrepreneurial & Innovation"/> <input type="text" value="Financial Reporting"/>

Members Search					
Result			23 Members Found / 20 Shown.		
Name	Job Title	Organization	City	State/Province	Country
Brandt, Erich Alexander	Consultant	Pinnacle Actuarial Resources Inc	Bloomington	IL	USA

<u>Brogadir, Zachary T</u>		Pinnacle Actuarial Resources Inc	Chicago	IL	USA
<u>Chen, Michael Keryu</u>	Actuary	Pinnacle Actuarial Resources Inc	Bloomington	IL	USA
<u>Freihaut, Derek W</u>	Consulting Actuary	Pinnacle Actuarial Resources Inc	Bloomington	IL	USA
<u>Godbold, Mary Jo E</u>	Senior Vice President & Actuary	Pinnacle Actuarial Resources Inc	Atlanta	GA	USA
<u>Gresham, Legare W</u>	Consulting Actuary	Pinnacle Actuarial Resources Inc	Atlanta	GA	USA
<u>Herbers, Joseph A</u>	Managing Principal	Pinnacle Actuarial Resources Inc	Bloomington	IL	USA
<u>Hillebrandt, Aaron Nicholas</u>	Consulting Actuary	Pinnacle Actuarial Resources Inc	Bloomington	IL	USA
<u>Kolde, Thomas R</u>	Consultant	Pinnacle Actuarial Resources Inc	Chicago	IL	USA
<u>Liu, Jing</u>	consulting actuary	Pinnacle Actuarial Resources Inc	San Ramon	CA	USA
<u>Maxwell, Laura A</u>	Consulting Actuary	Pinnacle Actuarial Resources Inc	San Ramon	CA	USA
<u>Mosler, Timothy C</u>	Senior Consulting Actuary	Pinnacle Actuarial Resources Inc	Atlanta	GA	USA
<u>Mosley, Roosevelt C</u>	Principal & Consulting Actuary	Pinnacle Actuarial Resources Inc	Bloomington	IL	USA
<u>Parmenter, Brett A</u>	Senior Actuarial Analyst	Pinnacle Actuarial Resources Inc	Chicago	IL	USA
<u>Randolph, II, Arthur R</u>	Principal & Consulting Actuary	Pinnacle Actuarial Resources Inc	Atlanta	GA	USA
<u>Sirovatka, Elissa M</u>		Pinnacle Actuarial Resources Inc	Chicago	IL	USA
<u>Truttmann, Darcie</u>		Pinnacle Actuarial Resources Inc	Bloomington	IL	USA
<u>Wade, John E</u>	Consulting Actuary	Pinnacle Actuarial Resources Inc	Greenwood	IN	USA
<u>Walker, Kathryn A</u>	Consulting Actuary	Pinnacle Actuarial Resources Inc	Chicago	IL	USA
<u>Walling, III, Robert J</u>	Principal & Consulting Actuary	Pinnacle Actuarial Resources Inc	Bloomington	IL	USA
1 2					

Important Note: Please review the Terms of Use with regards to the usage of the Online Directory of Actuarial Memberships. The operators of the Online Directory reserve the right to restrict access to the Online Directory upon violation of these terms.

SOA does not warrant the accuracy, completeness, or timeliness of the information shown. In no event shall the SOA be liable to you or anyone else for any decision made or action taken by you in reliance on such information.

John E Wade	
Personal Information John E Wade Consulting Actuary Pinnacle Actuarial Resources Inc 70 E Main St Suite F Greenwood, IN 46143-1393 United States Tel: +1(317)889-5760 Fax: 1(309)807-2301 Email: jwade@pinnacleactuarial.com	Designations MAAA 2002 ACAS 2002 Academic Degrees B.S. M.A. Other Professional Designations Industry Consulting Primary Area of Practice General Insurance/Property Casualty Specializations Society of Actuaries Sections

SOA does not warrant the accuracy, completeness, or timeliness of the information shown. In no event shall the SOA be liable to you or anyone else for any decision made or action taken by you in reliance on such information.

Laura A Maxwell	
Personal Information Laura A Maxwell Consulting Actuary Pinnacle Actuarial Resources Inc 2603 Camino Ramon Ste 421 San Ramon, CA 94583-9128 United States Tel: +(415) 692-0938 Fax: (309) 807-2301 Email: lm Maxwell@pinnacleactuarial.com	Designations MAAA 2002 FCAS 2004 Academic Degrees B.S. Other Professional Designations Industry Consulting Primary Area of Practice General Insurance/Property Casualty Specializations Society of Actuaries Sections Joint Risk Management (SOA - CAS - CIA)

SOA does not warrant the accuracy, completeness, or timeliness of the information shown. In no event shall the SOA be liable to you or anyone else for any decision made or action taken by you in reliance on such information.

Arthur R Randolph II	
Personal Information Arthur R Randolph II Principal & Consulting Actuary Pinnacle Actuarial Resources Inc One Glenlake Parkway Suite 1285 Atlanta, GA 30328 United States Tel: +1(678)894-7258 Fax: 1(770)587-0304 Email: arandolph@pinnacleactuaries.com	Designations MAAA 2005 FCAS 2007 Academic Degrees Other Professional Designations CPCU ARE ARM Industry Consulting Primary Area of Practice General Insurance/Property Casualty Specializations Commercial Lines Financial Reporting Liability Insurance Personal Lines Product Pricing/Development Property Insurance Reinsurance Valuation/Reserving Workers Compensation Insurance Society of Actuaries Sections Joint Risk Management (SOA - CAS - CIA)

SOA does not warrant the accuracy, completeness, or timeliness of the information shown. In no event shall the SOA be liable to you or anyone else for any decision made or action taken by you in reliance on such information.



HISTORY PROFILE

[« Back to Search Results](#)

Mr. John E. Wade, ACAS
ACAS 2002
Consulting Actuary
Pinnacle Actuarial Resources, Inc.
70 East Main Street
Ste F
Greenwood, IN 46143
UNITED STATES
Phone: (317)889-5760
E-mail: jwade@pinnacleactuaries.com

Attestation:

2012 - Have complied
2013 - Have complied
2014 - Have complied
2015 - Have complied
2016 - Have complied
2017 - Have complied

Publications

Committees

committee name	position	start date	end date
Nominating Committee	Member	11/16/2016	
Casualty Loss Reserve Seminar Joint Program Committee	Vice Chairperson	10/16/2015	
University Liaisons	Member	10/16/2014	
Casualty Loss Reserve Seminar Joint Program Committee	Member	10/15/2013	10/15/2015
Professionalism Education Committee (COPE)	Member	09/02/2008	11/04/2013
Member Advisory Panel Committee	Member	12/11/2003	11/19/2008



HISTORY PROFILE

[« Back to Search Results](#)

Laura A. Maxwell, FCAS
FCAS 2004
Consulting Actuary
Pinnacle Actuarial Resources, Inc.
2603 Camino Ramon Ste 421
San Ramon, CA 94583-9128
UNITED STATES
Phone: 415-692-0938
Fax: 309-807-2301
E-mail: lm Maxwell@pinnacleactuarial.com

Attestation:

2012 - Have complied
2013 - Have complied
2014 - Have complied
2015 - Have complied
2016 - Have complied
2017 - Have complied

Publications

Committees

committee name	position	start date	end date
Cyber Risk Task Force	Member	09/28/2016	
Casualty Actuaries of the Bay Area (CABA)	Secretary	07/23/2016	
Webinar Committee	Chairperson	08/13/2015	
Examination Committee	Member	08/26/2012	
Professional Education Policy Committee	Member	09/23/2015	02/10/2016
Examination Committee	Member	04/18/2011	08/27/2012
Examination Committee	Member	10/06/2009	12/31/2010
Webinar Committee	Member	01/06/2009	08/13/2015
Examination Committee	Member	08/18/2004	10/06/2009
Student Liaison	Member	05/01/1996	07/31/1999



CASUALTY ACTUARIAL SOCIETY

HISTORY PROFILE

[« Back to Search Results](#)

Mr. Arthur R. Randolph, FCAS
FCAS 2007
Principal & Consulting Actuary
Pinnacle Actuarial Resources, Inc.
1 Glenlake Pkwy Ste 1285
Atlanta, GA 30328-3448
UNITED STATES
Phone: 678-894-7258
Fax: 770-587-0304
E-mail: arandolph@pinnacleactuarial.com

Attestation:

2012 - Have complied
2013 - Have complied
2014 - Have complied
2015 - Have complied
2016 - Have complied
2017 - Have complied

Publications

Committees

committee name	position	start date	end date
Program Planning Committee	Member	09/19/2013	10/13/2015
Joint CAS/SOA Committee on Career Encouragement and Actuarial Diversity	Member	03/20/2013	04/16/2014
Joint CAS/SOA Committee on Actuarial Diversity	Member	11/04/2010	03/20/2013
Examination Committee	Member	09/01/2010	05/04/2011
Liaison to the International Association of Black Actuaries	Liaison	11/01/2007	11/01/2008
Examination Committee	Member	08/03/2007	08/31/2010
Joint CAS/SOA Committee on Actuarial Diversity	Member	02/01/2006	09/09/2010



John E. Wade

ACAS, MAAA
Consulting Actuary

Contact information

Pinnacle Actuarial Resources, Inc.
70 East Main Street
Suite F
Greenwood, IN 46143
www.pinnacleactuarial.com

Direct: (317) 889-5760
Mobile: (317) 340-7959
Data: (309) 807-2301
jwade@pinnacleactuarial.com

Focus

State and Municipal Funds
Reserving, Statements of Actuarial
Opinions and Pricing
Regulatory Support

Education

Ball State University
B. S. Actuarial Science
M. A. Actuarial Science

Certifications

Associate of the Casualty Actuarial Society
(ACAS)

Member of American Academy of
Actuaries (MAAA)

Professional Experience

John Wade is a Consulting Actuary with Pinnacle Actuarial Resources, Inc., managing the Indianapolis, Indiana office and has been providing actuarial consulting services since 1994, after having been employed by two primary carriers from 1978 - 1994. His practice is concentrated in providing reserving, funding and pricing studies for a wide variety of clients, including insurance companies, trade organizations, public entities and regulators.

His skill set includes loss reserving and rating for most lines of business, liability assessment for various funds, hands-on interaction with regulators, and project management. Mr. Wade is an Associate of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. He serves or has served on the Nominating Committee, the Casualty Loss Reserve Seminar Planning Committee (Vice Chairman 2016-Present), the University Liaison Program, the Committee on Professionalism Education and the Membership Advisory Panel Committee of the Casualty Actuarial Society, as well as the Emerging Issues Task Force of the Casualty Practice Council of the American Academy of Actuaries. Mr. Wade often speaks at industry events. He has actively mentored college actuarial students as well as young actuarial candidates already in the professional work force.

Engagement Experience

- Appointed Actuary to several domestic insurance companies
- Consultant to State Insurance Departments in the review of rate filings and/or financial examinations
- Consultant to over a dozen State and Municipal Funds in their reserve analysis and funding needs
- On-site consultant at various companies, complementing internal actuarial operations
- Training of client companies' actuarial students
- Conducted numerous rate indications and prepared supporting filing materials

Presentation/Panelist Venues

- Casualty Actuarial Society, Annual and Spring Meetings
- Casualty Actuarial Society, Casualty Loss Reserve Seminar
- Casualty Actuarial Society, Course on Professionalism, Faculty
- Casualty Actuarial Society, Ratemaking and Product Management Seminar
- Casualty Actuarial Society, Webinars
- Indiana Department of Insurance
- National Tanks Conference & Expo
- National Conference of Insurance Guaranty Funds
- Pinnacle Actuarial Resources, Apex Webinar Series
- Society of Insurance Research
- Zurich North American, Internal Training Conference

CURRICULUM VITAE

NAME	John E. Wade	
BUSINESS ADDRESS	70 East Main Street, Suite F Greenwood, IN 46143 Phone: (317) 889-5760 Fax: (309) 807-2301 E-mail: jwade@pinnacleactuaries.com	
EDUCATION	BALL STATE UNIVERSITY	
	Bachelor of Science	1977
	Major: Actuarial Science	
	Minor: Economics	
	Master of Arts	1979
	Major: Actuarial Science	
CONTINUING EDUCATION	Attendance at CAS semi-annual meetings and various ratemaking and loss reserving seminars	
	Meets all continuing education requirements of the American Academy of Actuaries (AAA) necessary to sign statements of actuarial opinion.	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	Casualty Actuarial Society (CAS)	
	Associate Member	2002
	American Academy of Actuaries (AAA)	2002
EMPLOYMENT HISTORY	Pinnacle Actuarial Resources, Inc.	2003 - Present
	Miller, Herbers, Lehmann & Associates, Inc.	1997 – 2002
	Actuarial Business Consultants, Inc.	1993 - 1997
	Indiana Farm Bureau Insurance	1984 - 1993
	State Farm Mutual Automobile Insurance	1978 – 1984
PROFESSIONAL ACTIVITIES	CAS Membership Advisory Panel Committee	2003 - 2008
	CAS Committee on Professionalism Education	2008 - 2013
	CAS Casualty Loss Reserve Seminar Planning Com	2014 - 2016
	CAS CLRS Planning Committee Vice Chairman	2016 - Present
	CAS University Liaison Program	2014 - Present
	CAS Nominating Committee	2016 - Present
	AAA Emerging Issues Task Force (P&C)	2008 - 2013

John E. Wade – Curriculum Vitae
Page Two

**PROFESSIONAL
PRESENTATIONS**

“Role of the Consulting Actuary”
Society of Insurance Research, 2004
Loss Reserve Training Seminar
Indiana Department of Insurance, Financial Services Division, 2005
“Making an Actuarially Sound Rate Filing”
Pinnacle Actuarial Resources, Inc. Apex Webinar series, 2008
“ASOP Fables, Real World Usage of the Actuarial Standards of Practice”
Casualty Actuarial Society, Spring 2008
“Ethical Case Studies from the Course on Professionalism”
Casualty Loss Reserve Seminar, 2009
Faculty, Course on Professionalism
Casualty Actuarial Society, 2009-2013
“Do You Know the Rules of the Actuarial Professionalism Road?”
Casualty Actuarial Society, 2010
“Do We Have Enough Money? - An Actuarial Perspective”
National Tanks Conference & Expo, 2010
“Interactive Mock Trial Professionalism Session”
Casualty Actuarial Society, 2011
“What is Professionalism?”
Casualty Loss Reserve Seminar, 2011
“State Fund Solvency”
National Tanks Conference & Expo, 2012
“Guaranty Fund Capacity and the NCIGF Stress Test”
National Conference of Insurance Guaranty Funds, 2012
“Sample Reserving Report – Does It Stand Up To Scrutiny?”
Casualty Actuarial Society, 2012
“Lights, Camera, Professionalism”
Casualty Loss Reserve Seminar, 2012
“What is ... Professionalism? Take Two!”
CAS Ratemaking and Product Management Seminar, 2012
“Catastrophes and USTs – No Tanks”
Pinnacle Actuarial Resources, Inc. Apex Webinar series, 2013
“Jeopardy Professionalism”
Zurich North American, Internal Training Conference, 2013
“Professionalism and the Practicing Actuary”
Casualty Actuarial Society, Webinar 2013
“Second Injury Funds, Forever. Really?”
Pinnacle Actuarial Resources, Inc. Apex Webinar series, 2014
“Coal Mine Reclamation Funds”
Pinnacle Actuarial Resources, Inc. Apex Webinar series, 2014
“Balancing Expectations: Actuaries Who Are Also Executives”
Casualty Loss Reserve Seminar, 2014
“Proposed Changes in Ratemaking, ASOP Exposure and Discussion Drafts”
Pinnacle Actuarial Resources, Inc. Apex Webinar series, 2015

John E. Wade – Curriculum Vitae
Page Three

**PROFESSIONAL
PRESENTATIONS**

“Professionalism in a Reserve Setting”
Casualty Loss Reserve Seminar, 2015
“Actuarial Communications, ASOP 41 and More”
Pinnacle Actuarial Resources, Inc. Apex Webinar series, 2015
“Workers Compensation Game Changers”
Pinnacle Actuarial Resources, Inc. Apex Webinar series, 2016

**SIGNIFICANT
ASSIGNMENTS**

Consulting Actuary to the Indiana Department of Insurance, reviewing P&C Rate Filings	2005 - 2011
Consulting Actuary to State Insurance Departments providing examination and funding support	2006 - Present
Appointed actuary to several insurance companies	2006 - Present
Liability and funding analysis of State, Agency and Municipal Workers Compensation Funds	2006 - Present
Liability and funding analysis of State Second Injury Funds	2006 - Present
Liability and funding analysis of State Petroleum Storage Tank Funds	2006 - Present
Liability and funding analysis of State Mine Reclamation Insurance Funds	2006 - Present
Liability and funding analysis of state Mine Subsidence Insurance Funds	2006 - Present
Support on Audits of various State Funds	2006 - Present



Laura A. Maxwell

FCAS, MAAA
Consulting Actuary

Contact information

Pinnacle Actuarial Resources, Inc.
2603 Camino Ramon, Suite 421
San Ramon, CA 94583
www.pinnacleactuarial.com

Direct: (415) 692-0938
Mobile: (925) 487-3590
Data: (309) 807-2301
Email: lm Maxwell@pinnacleactuarial.com

Focus

Public Entities, Enterprise Risk Management, Loss Reserving, Predictive Analytics, Pricing/Product Management, Large Project Management

Education

Moravian College
BS Mathematics

Certifications

Fellow of the Casualty Actuarial Society (FCAS)

Member of American Academy of Actuaries (MAAA)

SAS® Certified Predictive Modeler Using SAS® Enterprise Miner™ 5

Japanese Language Proficiency Test, Level 3

Professional Experience

Laura Maxwell is a Consulting Actuary with Pinnacle Actuarial Resources, Inc. in the San Francisco, California office. She holds a Bachelor of Science degree in Mathematics from Moravian College. She has more than 25 years of actuarial experience in the property/casualty insurance industry and has provided consulting services since 2003.

Ms. Maxwell is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. She currently serves the Casualty Actuarial Society (CAS) as a member of the Examination Committee, Chair of the Webinar Committee and Secretary/Treasurer of the Casualty Actuaries of the Bay Area. Ms. Maxwell is a SAS® Certified Predictive Modeler Using SAS® Enterprise Miner™ 5.

Prior to consulting she was a product manager for a direct auto insurer and held actuarial positions with an insurance department and rating bureau. Her background includes personal and commercial lines pricing and reserving.

Engagement Experience

- Serves as the Appointed Actuary for three domestic insurance companies
- Provides loss reserve and funding analysis for several public entities self-insurance exposure
- Conducts reserve analyses for the State of West Virginia monopolistic state funds
- Participated in several insurance company audits for the New York State Insurance Department
- Prepares California rate filings
- Conducted rate filing reviews for several insurance departments
- Assisted in the development of underwriting score models for commercial insurers

Presentations/ Professional Publications

- "Regulatory Review of ORSA Framework", *Risk Management: Part Five How to Review an ORSA*, Joint Risk Management Section, 2014
- "Ride Sharing and the Impact of the Private Passenger Automobile Insurance Industry," Casualty Actuarial Society Centennial Meeting, November 10 & 11, 2014 and Casualty Actuarial Society Webinar, July 23, 2014
- "Effective Reserving Project Management," Casualty Loss Reserve Seminar, September 16, 2014
- "ORSA Implementation Planning – The Time is Now", IASA Conference, June 4, 2013
- "You've Set Your Goals! You've Evaluated Your Outcomes! Are You Realizing Your Rewards", CWC & Risk Conference, Dana Point, CA, September 20, 2012
- "Lights! Camera! Professionalism!", Casualty Loss Reserve Seminar, Denver, CO, September 6, 2012 and San Diego, CA, September 15, 2014
- "Using Predictive Modeling to Investigate the Underlying Claims Process and Understand its Impact on Traditional Loss Reserving Methods," Casualty Loss Reserve Seminar, Las Vegas, NV, September 16, 2011
- "Free Markets are the Best Way to Lower Workers Compensation Costs," Pinnacle Research Brief, January, 2010

CURRICULUM VITAE

NAME	Laura A. Maxwell	
BUSINESS ADDRESS	2603 Camino Ramon, Suite 421 San Ramon, California 94583 Phone: (415) 692-0938 Fax: (309) 807-2301 E-mail: lm Maxwell@pinnacleactuaries.com	
EDUCATION	MORAVIAN COLLEGE Bachelor of Science 1985 Major – Mathematics	
CONTINUING EDUCATION	Attendance at CAS meetings and seminars Meets all continuing education requirements of the American Academy of Actuaries (AAA) necessary to sign statements of actuarial opinion SAS® Certified Predictive Modeler Using SAS® Enterprise Miner™ 5	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	Casualty Actuarial Society (CAS) Associate Member Fellow American Academy of Actuaries (AAA)	2002 2004 2002
EMPLOYMENT HISTORY	Pinnacle Actuarial Resources, Inc. Milliman, Inc. Kemper Direct NJ Dept. of Banking & Insurance National Council on Compensation Insurance	2006 - Present 2003 - 2005 1998 - 2003 1991 – 1998 1987 - 1991
PROFESSIONAL ACTIVITIES	CAS Webinar Committee CAS Examination Committee CAS Student Liaison Committee	2009 - Present 2004 - Present 1996 - 1998
PROFESSIONAL PUBLICATIONS	“Estimating Liabilities for Losses and Loss Adjustment Expenses,” (co-written with Derek Freihaut), Insurance Accounting and Systems Association (IASA) Property & Casualty Insurance Accounting Textbook – 9th Edition, Chapter 5, 2016 “Regulatory Review of ORSA Framework”, Risk Management: Part Five How to Review an ORSA, Joint Risk Management Section, 2014 “Free Markets are the Best Way to Lower Workers Compensation Costs”, Pinnacle Research Brief, January, 2010	

Laura A. Maxwell – Curriculum Vitae
Page 2

**PROFESSIONAL
PRESENTATIONS**

“Actuarial Communications – ASOP 41 and More, Pinnacle Apex Discussion Series, December 10, 2015
“Ride Sharing and the Impact of the Private Passenger Automobile Insurance Industry,” Casualty Actuarial Society Centennial Meeting, November 10 & 11, 2014, Pinnacle Apex Discussion Series, November 20, 2015 and Casualty Actuarial Society Webinar, July 23, 2015
“Effective Reserving Project Management,” Casualty Loss Reserve Seminar, September 16, 2014
“The Challenge of Property & Casualty ASOPs”, Pinnacle Apex Discussion Series, June 17, 2014
“ORSA Implementation Planning – The Time is Now”, IASA Conference, Washington, D.C., June 4, 2013 and Pinnacle Apex Discussion Series, June 20, 2013
“You’ve Set Your Goals! You’ve Evaluated Your Outcomes! Are You Realizing Your Rewards,” CWC & Risk Conference, Dana Point, CA, September 20, 2012
“Lights! Camera! Professionalism!” Casualty Loss Reserve Seminar, Denver, CO, September 6, 2012 and San Diego, CA, September 15, 2014
“Current State of Enterprise Risk Management”, Pinnacle Apex Discussion Series, March 15, 2012
“Workers Compensation Healthier in Competitive States”, Pinnacle Apex Discussion Series, May 21, 2009
“Workshop: How to Use Predictive Modeling in Claim Organizations”, National Underwriter Annual Claim Event, Las Vegas, NV, June 25, 2007

**APPOINTED
ACTUARY**

Alliance United Insurance Company	2009-2015
Homestead Insurance Company	2012-2015
Pacific Capital Insurance Company	2013-Present
Century Insurance Company (Guam), Ltd.	2016
Century Insurance Company (Saipan), Ltd.	2016



Arthur R. Randolph, II

FCAS, MAAA, CPCU, ARM, ARe
Principal & Consulting Actuary

Contact Information

Pinnacle Actuarial Resources, Inc.
One Glenlake Parkway, Suite 1285
Atlanta, GA 30328
www.pinnacleactuarials.com

Direct: (678) 894-7258
Mobile: (770) 510-8170
Data: (770) 587-0304
arandolph@pinnacleactuarials.com

Focus

Medical Professional Liability Insurers,
Traditional Property/Casualty Insurers,
Self-Insured Hospitals, Hospital and
Physician Groups, Captive Insurers and
Large Employers, Ratemaking,
Reserving, Risk Transfer Testing,
Developing Experience and
Retrospective Rating Plans, Personal
and Commercial Property, Workers'
Compensation

Education

Temple University
B.B.A. in Actuarial Science & Risk
Management

Certifications

Fellow of the Casualty Actuarial Society
(FCAS)

Member of the American Academy of
Actuaries (MAAA)

Chartered Property Casualty Underwriter
(CPCU)

Associate in Risk Management (ARM)

Associate in Reinsurance (ARE)

Professional Experience

Arthur Randolph is a Principal and Consulting Actuary with Pinnacle Actuarial Resources, Inc. managing the firm's Atlanta, Georgia office, and has been in the insurance industry since 1998, consulting since 2001. His consulting career has focused on medical professional liability, homeowners, workers' compensation, commercial and personal automobile, general liability, and commercial multi-peril exposures.

Mr. Randolph provides actuarial consulting services to medical professional liability insurers, traditional property and casualty insurers, self-insured hospitals and physician groups, public and private self-insured entities, risk retention groups, and captive insurers. His core services include ratemaking, reserving, risk transfer testing, funding allocations among members of risk sharing groups, and developing experience and retrospective rating plans. Mr. Randolph also conducts alternative risk financing feasibility and funding studies (e.g., large deductible plans, self-insurance structures, risk retention groups, captives) for organizations in both the public and private sectors that face various risk exposures. When clients have become involved in mergers and acquisitions, he has worked with them to seamlessly address all associated actuarial issues.

Mr. Randolph is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. He also holds the following insurance designations: Chartered Property Casualty Underwriter, Associate in Risk Management and Associate in Reinsurance. Mr. Randolph is a member of the CAS Program Planning Committee and the AAA Medical Professional Liability Committee, and is actively involved with Physician Insurers Association of America (PIAA), National Association of Mutual Insurance Companies (NAMIC), Florida Chamber of Commerce, Casualty Actuaries of the Southeast (CASE), Gamma Iota Sigma Insurance Fraternity (GIS), and International Association of Black Actuaries (IABA, Director & Past Treasurer). He is a past member of the CAS Examination Committee and served as President & Director of the IABA Foundation.

Engagement Experience

- Serves as Appointed Actuary and/or Loss Reserve Specialist for numerous insurance carriers, captive insurance companies, and self-insured entities
- Advises numerous self-insured entities and insurance companies on matters related to financial reporting of unpaid claim liabilities, routinely presenting to Boards of Directors and Executive Committees charged with financial reporting
- Performs extensive rate level reviews for a variety of coverages, including preparing and submitting filings, and responding to insurance department inquiries
- Establishes proper funding allocations among members of risk sharing groups and among revenue cost centers
- Conducts valuation analyses of merger and acquisition targets
- Performs alternative risk financing feasibility studies and retention optimization studies including financial performance modeling
- Performs classification relativity studies to ensure price optimization and rate level adequacy
- Develops experience and retrospective rating plans for medical professional liability and workers' compensation insurers, including post-implementation parameter testing
- Assists insurance companies with new product development and expansion into new territories, states, and risk classes

CURRICULUM VITAE

NAME	Arthur R. Randolph, II	
BUSINESS ADDRESS	One Glenlake Parkway, Suite 1285 Atlanta, GA 30328 Phone: (678) 894-7258 Mobile: (770) 510-8170 Fax: (770) 587-0304 E-mail: arandolph@pinnacleactuaries.com	
EDUCATION	TEMPLE UNIVERSTY, PHILADELPHIA, PA Bachelor of Business Administration Major – Actuarial Science & Risk Management	1997
CONTINUING EDUCATION	<p>Estimated study time exceeding over 5,000 hours necessary for completion of qualifying exams for membership in the Casualty Actuarial Society (CAS) and the American Institute for Chartered Property Casualty Underwriters (AICPCU)</p> <p>Participation as an attendee at the CAS Ratemaking & Product Management Seminar, Casualty Loss Reserve Seminar, CAS Annual and Spring Meetings, Insurance Managers Association of Cayman (IMAC), Physician Insurers Association of America (PIAA), Risk and Insurance Management Society (RIMS), American Society for Healthcare Risk Management (ASHRM), National Association of Mutual Insurance Companies (NAMIC), and other educational seminars on special topics (e.g., medical professional liability, captive and alternative markets, property catastrophe risk)</p> <p>Met all continuing education requirements of the American Academy of Actuaries (AAA) necessary to sign statements of actuarial opinion</p>	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	CAS Associate Member (ACAS) Fellow (FCAS) AAA AICPCU Associate in Risk Management (ARM) Chartered Property Casualty Underwriter (CPCU) Associate in Reinsurance (ARe) International Association of Black Actuaries (IABA) Casualty Actuaries of the Southeast (CASE)	2005 2007 2005 2011 2012 2012 2001 - Present 2007 - Present

Arthur R. Randolph, II – Curriculum Vitae
Page 2

EMPLOYMENT HISTORY	Pinnacle Actuarial Resources, Inc.	2012 - Present
	Towers Watson / Towers Perrin	2005 - 2012
	The PMA Insurance Group	2003 - 2005
	PricewaterhouseCoopers LLP	2001 - 2003
	Allstate Insurance Company / CNA Personal Insurance	1998 - 2001
ACTUARIAL INTERNSHIPS	Towers Perrin	1997
	American International Group	1996
	Milliman & Robertson	1994 - 1995
PROFESSIONAL ACTIVITIES	AAA Medical Professional Liability Committee	2012 - Present
	CAS Program Planning Committee	2013 - Present
	Director, IABA	2014 - 2015
	CAS Joint Committee on Actuarial Diversity	2006 - 2014
	CAS Examination Committee	2007 - 2011
	Treasurer & Director, IABA	2003 - 2006
	President & Director, IABA Foundation	2004 - 2007
APPOINTED ACTUARY	Anchor Property & Casualty Insurance Company	2015
	Anchor Specialty Insurance Company	2015
	Capitol Preferred Insurance Company, Inc.	2014, 2015
	Family Security Insurance Company, Inc.	2015
	Florida Sheriffs Risk Management Fund	2014, 2015
	Harco National Insurance Company	2014, 2015
	IAT Reinsurance Company, Ltd.	2014, 2015
	KESA, The Kentucky Workers' Compensation Fund	2014, 2015
	Lincoln General Insurance Company	2010, 2011, 2013, 2014
	Purus Insurance Company	2014, 2015
	Security First Insurance Company, Inc.	2015
	Southern Fidelity Insurance Company, Inc.	2014, 2015
	Southern Fidelity Property & Casualty, Inc.	2014, 2015
	St. Johns Insurance Company, Inc.	2014, 2015
	United Property & Casualty Insurance Company	2013 - 2015
PROFESSIONAL PRESENTATIONS	<p>Numerous presentations at educational seminars and professional conferences conducted by a variety of organizations including the CAS, Florida Chamber of Commerce, South Carolina Captive Insurance Association, Temple University, Howard University and IABA on topics including medical professional liability and the impact of the Patient Protection and Affordable Care Act, Florida sinkhole reform and assignment of benefits, workers' compensation, credit score utilization in personal automobile insurance and homeowners insurance</p>	

Pinnacle Actuarial Resources, Inc.

Peer Review Procedures and Requirements

I. Purpose of Peer Review

The primary purposes of peer review are to maximize the quality and comprehension of our work product, and to minimize our own professional liability exposure within practical time and fee constraints.

The interest of the firm's clients, and those of the firm itself, mandate that work performed by the firm, and the communication of that work by the firm, conform to high professional standards. Appropriate recognition of such interests deserves and requires adoption of and compliance with certain internal standards and procedures regarding work performance and communication of the work product, the objectives of such standards and procedures being to attempt to determine, to the extent practicable, that:

- methods and assumptions employed are appropriate and acceptable in the circumstances;
- judgments made and applied are reasonable and supportable;
- communications to clients are accurate, complete and understandable; and
- work is performed adequately supports all statements and conclusions.

A system of peer review is the tool we use to exercise due care and diligence such that these objectives are achieved.

File documentation is an important element of peer review. The file must maintain an adequate trail which minimizes the risk of an undocumented or unsupported work product when viewed from the perspective of an independent third party.

The peer review system is intended to foster the maintenance of high professional standards and practices, consistently applied to Pinnacle Actuarial Resources, Inc (the Firm's) assignments. Thus, the review should not be considered perfunctory, even in cases of the most routine or straightforward assignments.

It will be the expressed duty of the Professional Standards Officer (PSO) to ensure the work product of the firm abides by these guidelines.

II. *Items Requiring Peer Review*

A. Written Correspondence

All substantive correspondence written in a professional capacity from the Firm to a client must be peer reviewed prior to release to the client.

- Written correspondence includes (but is not limited to) reports, letters, data requests, proposals, discussion outlines, presentations, and engagement confirmations.
- Documents submitted in draft form are to be peer reviewed prior to release to a client. A draft stamp, draft paper, or note that document has not been reviewed does not waive or delay the peer review requirement.
- Correspondence relating to billing, since it is written in an "administrative" capacity rather than a professional capacity, does not require a peer review. However, there may be significant benefits from reviewing billing with a peer.

When in doubt, err on the conservative side and have the document reviewed.

B. Oral discussions and presentations

Elements of an assignment subject to peer review include discussions with the client pertaining to The Firm's assumptions, methods, opinions, findings, conclusions, or recommendations related to the assignment. In many cases, it is not practical to obtain prior peer review of phone conversations and meetings. The consultant must decide whether peer review (either prior or post) of oral advice and opinions is necessary. Peer review of substantive oral advice may, in certain circumstances, require the presence of a second consultant. Presence of a second consultant will most likely be necessary for third party negotiations. Depending upon the nature of the issues, the presence of a second consultant may be necessary for testimony as an expert witness, either at hearings or depositions. When peer review of oral advice is not provided by the presence of a second consultant, there must be a review of subsequent written confirmation of the advice.

C. Proposals and Engagement Letters

Proposals and confirmation letters should always be specific about the scope of work, background as to client's operations, expected reliance on client and/or industry data, and expected number of days on site and attendance at meetings.

D. Joint Projects

Peer review requirements are not waived on joint projects with other firms. Components of the project and any references to or uses of the Firm's work elsewhere in the overall work product are subject to peer review standards of the firm. It would be beneficial for consultants to review the entire work product, even those sections outside of our area of expertise, for reasonableness and consistency.

E. Articles and Publications

All articles, publications, and similar materials intended for broad or general consumption, must be peer reviewed.

III. Definition of a "Peer"

A peer is someone who is qualified to perform the assignment. When deciding between/among potential peer reviewers the first choice should always be the person with the greater expertise in the type of work being reviewed.

1. Specialty Knowledge

Certain projects require a peer reviewer with expertise in the specific area being addressed, as opposed to general expertise. This is either because of the sensitivity and/or professional liability exposure of the type of assignment, the complex or technical nature of the work, or the desire to have consistent answers (and work quality) in certain industry segments. On the actuarial side, in particular, it is necessary to ensure that assumptions conform to specialty standards or that deviating assumptions are well supported.

Whenever there is a question regarding the appropriateness of a peer reviewer for a particular assignment, contact the PSO.

In the cases where all knowledgeable consultants in a specialty area are already involved in the project, or the specialty consists of a "sole practitioner," a consultant not involved in the project but familiar with the scope of work being performed should review the work for reasonableness. The PSO can assist in peer review selection in such cases.

2. Limitations

To minimize bias in the peer review process, the peer reviewer should not have directed the project. This does not preclude keeping the peer reviewer notified as to the project status and the general methodology and assumptions to be used. In fact, the peer reviewer is ideally assigned in the proposal process or when the project is received.

The independence of the consultant and the peer reviewer is a key criterion in peer reviewer selection. An account executive should not peer review the work done by a junior consultant on an account where the specific methodology and assumptions were established by the account executive and merely updated by the junior consultants. If the junior consultant has independently performed the analysis and established assumptions, then account executive peer review is acceptable, although not preferred.

It is desirable to select a new consultant and/or peer reviewer of a particular project after a certain number of years, e.g., two. Similar to the project involvement limitation, this principle is intended to maximize independence between the consultant and the peer reviewer, but balance the efficiency gained through repeat project management and/or peer reviews.

Special Situations

In these situations, the PSO is to be involved in the selection of the peer reviewer.

- Reserve Opinions

All Reserve Opinion letters must have a checklist attached and be reviewed by the PSO prior to release to the client.

- M&A/Conversions

All merger & acquisition work must be approved in advance by the Board of Directors. Peer reviewer must be approved in advance by the PSO. Every M&A assignment requires an engagement letter. All M&A engagement letters should be reviewed by the PSO before transmittal.

Two Answer Situations

The Firm will avoid any and all two answer situations as a de facto conflict of interest. Such two answer situations include, but are not limited to:

M&A - buyer vs. seller

M&A - two buyers

Rate filings

Insurance department vs. insurance company

Two different states

Two filers in same state

Any other potential "two answer" situation

3. Articles and Publications

Articles and publications are intended for a wide audience and enhance the image and reputation of the firm. As such, articles, publications, and similar materials intended for broad and general consumption are subject to peer review.

IV. Responsibilities of Account Executive/Project Manager, Peer Reviewer, and Tech Reviewer

A. Account Executive/Project Manager

1. Select peer reviewer on a timely basis.
2. Give as much notice as possible to peer reviewer as to timing.
3. Make sure the technical work and report meet your standards of quality before involving peer reviewer.
4. Make sure that technical review is performed prior to peer review, or that the peer reviewer is aware of any changes resulting from technical review.
5. Provide background and discuss any special client or analysis circumstances with the peer reviewer.
6. Make sure that all peer review comments have been incorporated or refuted.
7. Make sure that peer review is completed before sending out the report, including follow-up peer review if requested by reviewer or if indicated by circumstances (e.g., results have changed).
8. Make sure that peer review is properly documented in the client files.
9. Make sure that peer reviewer's time is recorded in the billing file.

B. Technical Reviewer

1. Check input and calculations, as well as footnotes, headings, and labels.
2. Check that results are correctly transcribed and cross referenced in text.
3. Check the appropriateness of the calculations as well as the arithmetic.
4. Make note of any calculations that are too complex to check within a reasonable time frame. These should be communicated to the peer reviewer (designated on form), who may direct a spot-check or check themselves.

5. Any questions about the level of detail of the technical review should be directed to the peer reviewer.
6. Any unresolved disagreement with the analyst should be referred to the consultant and/or peer reviewer.
7. Any other unusual concerns should be relayed to the peer reviewer.
8. Make sure that all backup to input and calculations is contained in the file.
9. Check and sign the peer/technical review form.

C. Peer Reviewer

1. For proposals, areas to be reviewed include:
 - a. firm qualifications and description
 - b. description of project personnel
 - c. description of our understanding of the project
 - d. definition of project scope
 - e. description of data requirements
 - f. fee estimate commensurate with level of effort, qualified if necessary
 - g. disclosure of significant qualifications or limitations to project scope
 - h. disclosure of limitations on distribution and use
 - i. disclosure of apparent or potential conflicts of interest
 - j. discussion of indemnification agreement, if required
 - k. references, if necessary
 - l. ownership of work product (copyright)
 - m. documentation of work product (record retention vs. return or destruction of documents)
 - n. reasonable deadlines for completion of work
 - o. payment of fees if project terminated

2. For report, areas to be reviewed include:
 - a. Purpose/Scope appropriate to proposal
 - b. Distribution & Use and Reliances/Limitations complete
 - c. Conclusions
 - i. address the important issues
 - ii. conform to scope
 - iii. adequately supported
 - d. Methods employed (assumptions/judgments)
 - i. reasonable and appropriate
 - ii. documented and described
 - e. Text and overall organization and appearance
 - i. clear and well-formatted
 - ii. includes background where necessary
 - iii. use draft paper/report over if not final
 - f. Exhibits/graphs clear and understandable
 - g. Background checks
 - i. conflicts of interest/independence resolved/disclosed
 - ii. letter of representation, if required
 - iii. indemnification agreement, if required
3. Answer technical reviewer's questions concerning level of detail of technical review or disagreements with the analyst.
4. Periodically discuss extent of review with technical reviewer to avoid gaps in overall review.
5. Advise the consultant as soon as possible if peer review cannot reasonably be accomplished by the project deadline.

The following related points pertaining to peer review should be noted:

- If the work product is not ready for a thorough peer review, the peer reviewer may advise the consultant as to the areas needing work and direct that the work be done before further peer review.
- The peer reviewer may determine that an alternative or additional peer reviewer needs to get involved. The peer reviewer should assist in identifying such a peer reviewer with the help of the PSO, if necessary. A peer reviewer should not ask to be replaced simply because of a disagreement with the consultant.
- Consider whether the work product or results have a more sensitive nature (e.g., assignment evolves into expert witness work; reserve indications have deteriorated markedly from our prior work; any result that may surprise a client). If so, give extra consideration to all aspects of the project, including the scope of project, billing status, support for methods and assumptions, method of communication of results, and ways to turn "bad news" into an opportunity to assist the client.
- Specifically identify items requiring action, follow-up or response by consultant.

D. Follow-up

At the completion of a peer review, the account executive/project manager should ask whether the peer reviewer needs to see the client product again before it is sent to the client. If peer review comments are relatively minor, the answer will most likely be no. On the other hand, if major changes are likely to result from peer review, then the answer may very well be yes. If the peer reviewer expects to see the product again before it is sent to the client, this should be made clear to the account executive/project manager. Follow-up by the technical reviewer is based on similar guidelines.

E. Resolution of Disagreements

1. If the analyst and technical reviewer disagree on an issue, the issue should be referred to the consultant and/or peer reviewer.
2. If the analyst disagrees with the consultant on an issue, the analyst's recourse is to bring the issue to the peer reviewer or the PSO.
3. Any unresolved disagreement between the technical reviewer and the analyst should be referred to the consultant and/or peer reviewer.

If the account executive/project manager and the peer reviewer cannot resolve a point of dispute between them, they should agree on an impartial arbitrator, who may be:

- another consultant who would be qualified to peer review the project, agreed upon by both parties
- the PSO
- another consultant designated by the PSO

Both parties should agree to abide by the conclusion reached by the impartial arbitrator. The PSO is available as a resource to resolve peer review conflicts.

V. Documentation

The peer review should be documented on the standard peer review form. This form should be filled out to the extent possibly by the report author, and provided to the peer reviewer along with the report or letter and any supporting files that are necessary. After the peer review has been completed, the signed form should be returned to the author or account executive. The signed copy of this form should be kept in the client file. Pending the return of the signed copy, a copy of the form that was sent to the peer reviewer should be kept in the file.

The current versions of the peer review/technical review form and reserve opinion checklist are attached. There are two acceptable approaches to file documentation:

- a) Keep all peer review/technical review drafts and comments with follow up notes as to how and why each comment was incorporated or refuted, or,
- b) Retain the signed peer review/technical review form in the client file after the project is completed.

In the latter case it is desirable for the peer reviewer to have an opportunity to perform a follow-up review on the final document before the earlier versions are destroyed.

VI. Audit

On an annual basis, the PSO shall conduct an audit of the files sufficient to determine the degree of compliance with these peer review requirements and shall submit a written report of the audit findings to the Board of Directors.

PROPERTY/CASUALTY ACTUARIAL CONSULTING ENGAGEMENTS

Our firm has over 500 active clients including insurers of all sizes, state insurance regulators, government insurance programs, captive insurance companies, self-insured entities, municipal pools, and risk retention groups. Following is a list of selected clients:

Allstate Insurance Group	Midwestern Higher Education Commission
American Family Insurance	Missouri Department of Insurance
American Medical Association	Missouri Workers Compensation Division
Amerisure Insurance Companies	Nationwide Insurance Group
California Department of Insurance	New Mexico Public Regulation Commission
Captive Resources, LLC	New Mexico Patient Compensation Fund
City of Detroit, MI	New York State Insurance Department
City of Phoenix, AZ	North Carolina Department of Insurance
City of Wichita, KS	Ohio Bureau of Workers Compensation
Connecticut Department of Insurance	Ohio Casualty Insurance
Educational School Insurance Cooperative	Ohio Department of Insurance
Farmers Insurance Group	Oregon Insurance Division
Florida Association of Counties Trust	QBE Insurance
Florida Department of Financial Services	ResCare
Florida Office of Insurance Regulation	Risk Services
Florida Sheriffs Association	SAIF Corporation
GEICO	South Carolina Department of Insurance
Governmental Interinsurance Exchange	Southwest Agency Risk Management
Hillsborough Area Regional Transit Illinois	State Farm Insurance Company
Public Transit Authority	Strategic Risk Services
Illinois Department of Insurance	Tennessee Department of Corrections
Illinois State Toll Highway Authority	Tennessee Department of Insurance
Indiana Department of Insurance	USA Risk
Kansas City Transit Authority	Vermont Department of Insurance
Kansas Workers Compensation Division	Virginia Birth Related Injury Fund
Kentucky Office of Insurance	Virginia State Corporation Commission
Kentucky Transportation Cabinet	Willis Captive Management
Kentucky Underground Storage Tank Fund	Wisconsin Patient Compensation Fund
Kentucky Workers Compensation Funding Commission	
Liberty Mutual Insurance Group	
Los Angeles Department of Water and Power	
Maine Bureau of Insurance	
Maryland Insurance Administration	
Massachusetts Division of Insurance	
Michigan Division of Insurance	
Michigan University Self-Insured Corp.	

State of West Virginia



Certificate

I, Mac Warner, Secretary of State of the State of West Virginia, hereby certify that

PINNACLE ACTUARIAL RESOURCES, INC.

a corporation formed under the laws of Illinois filed an application to be registered as a foreign corporation authorizing it to transact business in West Virginia. The application was found to conform to law and a "Certificate of Authority" was issued by the West Virginia Secretary of State on June 11, 2009.

I further certify that the corporation has not been revoked by the State of West Virginia nor has a Certificate of Withdrawal been issued to the corporation by the West Virginia Secretary of State.

Accordingly, I hereby issue this

CERTIFICATE OF AUTHORIZATION

Validation ID:6WV7A_4YRXT



*Given under my hand and the
Great Seal of the State of
West Virginia on this day of*

April 12, 2017

Mac Warner

Secretary of State



STATE OF WEST VIRGINIA
State Tax Department, Taxpayer Services Division
P. O. Box 885
Charleston, WV 25323-0885



Jim Justice, Governor

Dale W. Steager, State Tax Commissioner

PINNACLE ACTUARIAL RESOURCES, INC.
PO BOX 6139
BLOOMINGTON IL 61702-6139

Letter Id: L0684952768
Issued: 04/12/2017

West Virginia State Tax Department

Statement of Good Standing

EFFECTIVE DATE: April 12, 2017

A review of tax accounts indicates that the above named taxpayer is in good standing as of the effective date of this document.

The issuance of this Statement of Good Standing shall not bar any audits, investigations, assessments, refund or credits with respect to the taxpayer named above and is based only on a review of the tax returns and not on a physical audit of records.

Sincerely,

Nicole Grant, Tax Unit Supervisor
Taxpayer Services Division



Appendix H

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/19/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Arthur J. Gallagher Risk Management Services, Inc. 127 North Walnut St Itasca IL 60143		CONTACT NAME: PHONE (A/C, No, Ext): 630-595-5300 E-MAIL ADDRESS: CertRequests@ajg.com FAX (A/C, No): 630-694-4401	
		INSURER(S) AFFORDING COVERAGE	
		INSURER A: Hartford Casualty Insurance Company	
		INSURER B: Hartford Financial Services Group	
		INSURER C: Westchester Fire Insurance Company	
		INSURER D: Indian Harbor Insurance Company	
		INSURER E: BCS Insurance Company	
		INSURER F:	

COVERAGES**CERTIFICATE NUMBER: 77377152****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			83SBAPL7914	1/17/2017	1/17/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
A	<input type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			83SBAPL7914	1/17/2017	1/17/2018	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$10,000			83SBAPL7914	1/17/2017	1/17/2018	EACH OCCURRENCE \$4,000,000 AGGREGATE \$4,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	83WECKB7307	1/17/2017	1/17/2018	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000
C D E	Directors & Officers Liability Professional Liability Cyber Liability			G27165199004 MPP002287709 RPSP50080319M	1/17/2017 2/14/2016 1/17/2017	1/17/2018 2/14/2017 1/17/2018	Policy Aggregate \$1,000,000 Policy Aggregate \$2,000,000 Policy Aggregate \$5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Umbrella Liability- Follow Form
Professional Liability - Each Incident Limit \$2,000,000
Crime/Employee Theft - Each Incident Limit \$1,000,000/ Aggregate Limit \$1,000,000; Per D&O policy with carrier C.

CERTIFICATE HOLDER**CANCELLATION**

Proof of Insurance

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.

WV-10
Approved / Revised
12/16/15

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1. Application is made for 2.5% vendor preference for the reason checked:

- ☐ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
- ☐ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification;
- ☐ Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or**,
- ☐ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,

2. Application is made for 2.5% vendor preference for the reason checked:

- ☐ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,

3. Application is made for 2.5% vendor preference for the reason checked:

- ☐ Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or**,

4. Application is made for 5% vendor preference for the reason checked:

- ☐ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,

5. Application is made for 3.5% vendor preference who is a veteran for the reason checked:

- ☐ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,

6. Application is made for 3.5% vendor preference who is a veteran for the reason checked:

- ☐ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

7. Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules.

- ☐ Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Pinnacle Actuarial Resources, Inc.

Signed:  DEREK W. FREIHART

Date: April 12, 2017

Title: Principal and Vice President

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Pinnacle Actuarial Resources, Inc.

Authorized Signature: _____ Date: April 12, 2017

DEREK W. FREINAUT

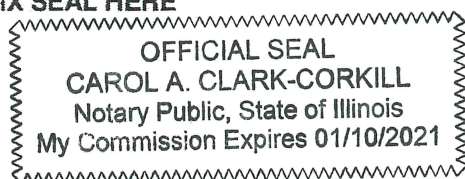
State of Illinois

County of McLean, to-wit:

Taken, subscribed, and sworn to before me this 24th day of April, 2017.

My Commission expires January 10, 2021.

AFFIX SEAL HERE



NOTARY PUBLIC

Carol A. Clark-Corkill

Purchasing Affidavit (Revised 08/01/2015)



Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Quotation
34 — Service - Prof

Appendix K
Page 1

Proc Folder: 299626

Doc Description: Actuarial Consulting Services for DEP

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2017-03-31	2017-04-13 13:30:00	CRFQ 0313 DEP1700000020	1

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV

25305

US

VENDOR

Vendor Name, Address and Telephone Number:

Pinnacle Actuarial Resources, Inc.

3109 Cornelius Drive

Bloomington, Illinois 61704

Phone: 309-807-2300

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers

(304) 558-0246

jessica.s.chambers@wv.gov

Signature X

FEIN # 11-3669570

DATE April 12, 2017

All offers subject to all terms and conditions contained in this solicitation

The West Virginia Purchasing Division is soliciting bids on behalf of the Department of Environmental Protection, Office of Special Reclamation located at 601 57th Street, SE Charleston, WV 25304 to establish a contract to provide actuarial services to assist the Department and the Special Reclamation Advisory Council, per the specifications, and Terms and Conditions as attached.

INVOICE TO		SHIP TO	
ENVIRONMENTAL PROTECTION OFFICE OF SPECIAL RECLAMATION 47 SCHOOL ST, STE 301 PHILIPPI WV26416 US		ENVIRONMENTAL PROTECTION OFFICE OF SPECIAL RECLAMATION 47 SCHOOL ST, STE 301 PHILIPPI WV 26416-9998 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Actuarial consulting services				

Comm Code	Manufacturer	Specification	Model #
80101512			

Extended Description :

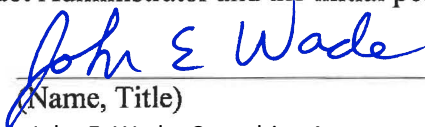
Actuarial consulting services for the WVDEP Office of Special Reclamation

	Document Phase	Document Description	Page 3
DEP1700000020	Final	Actuarial Consulting Services for DEP	of 3

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.



John E. Wade, Consulting Actuary

(Name, Title)

John E. Wade, Consulting Actuary

(Printed Name and Title)

70 E. Main Street, Suite F, Greenwood, IN 46143-1393

(Address)

317-889-5760/309-807-2301

(Phone Number) / (Fax Number)

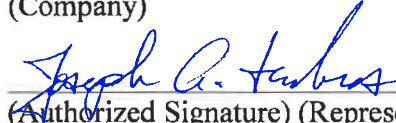
jwade@pinnacleactuaries.com

(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Pinnacle Actuarial Resources, Inc.

(Company)



Joseph A. Herbers, Managing Principal/President

(Authorized Signature) (Representative Name, Title)

Joseph A. Herbers, Managing Principal and President

(Printed Name and Title of Authorized Representative)

April 12, 2017

(Date)

309-807-2300/309-807-2301

(Phone Number) (Fax Number)



Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Quotation
34 — Service - Prof

Appendix M
Page 1

Proc Folder: 299626

Doc Description: Addendum No.01 - Actuarial Consulting Services for DEP

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2017-03-31	2017-04-13 13:30:00	CRFQ 0313 DEP1700000020	2

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV

25305

US

VENDOR

Vendor Name, Address and Telephone Number:

Pinnacle Actuarial Resources, Inc.

3109 Cornelius Drive

Bloomington, Illinois 61704

Phone: 309.807.2300

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers

(304) 558-0246

jessica.s.chambers@wv.gov

Signature X

FEIN # 11-3669570

DATE April 12, 2017

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:**Addendum**

Addendum No.01 issued to publish and distribute the attached information to the vendor community.

The West Virginia Purchasing Division is soliciting bids on behalf of the Department of Environmental Protection, Office of Special Reclamation located at 601 57th Street, SE Charleston, WV 25304 to establish a contract to provide actuarial services to assist the Department and the Special Reclamation Advisory Council, per the specifications, and Terms and Conditions as attached.

INVOICE TO	SHIP TO
ENVIRONMENTAL PROTECTION OFFICE OF SPECIAL RECLAMATION 47 SCHOOL ST, STE 301 PHILIPPI WV26416 US	ENVIRONMENTAL PROTECTION OFFICE OF SPECIAL RECLAMATION 47 SCHOOL ST, STE 301 PHILIPPI WV 26416-9998 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Actuarial consulting services	0.00000			

Comm Code	Manufacturer	Specification	Model #
80101512			

Extended Description :

Actuarial consulting services for the WVDEP Office of Special Reclamation

SOLICITATION NUMBER: CRFQ DEP 1700000020
Addendum Number: No.01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- ☐ | Modify bid opening date and time
- ☐ | Modify specifications of product or service being sought
- ☒ | Attachment of vendor questions and responses
- ☐ | Attachment of pre-bid sign-in sheet
- ☐ | Correction of error
- ☐ | Other

Description of Modification to Solicitation:

This addendum is issued to modify the solicitation per the attached documentation and the following:

1. To publish vendor questions and agency answers.

No other changes.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

Technical Questions Received for:
CRFQ DEP1700000020

1. In section 4.1.2.2 the evaluation date is listed as June 30, 2016. I assume the RFQ meant to post this as June 30, 2017. Please confirm.

A: Yes, the date should be June 30, 2017

2. Sections 4.1.2.7 and 4.1.2.8 only refer to electronic copies of the report and work papers. The payment schedule in section 7.1 lists Physical and Electronic Copies of work papers as a criteria. I assume the Physical Copies are not required. Please confirm.

A: Yes, physical copies are not required.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

<input checked="" type="checkbox"/> Addendum No. 1	<input type="checkbox"/> Addendum No. 6
<input type="checkbox"/> Addendum No. 2	<input type="checkbox"/> Addendum No. 7
<input type="checkbox"/> Addendum No. 3	<input type="checkbox"/> Addendum No. 8
<input type="checkbox"/> Addendum No. 4	<input type="checkbox"/> Addendum No. 9
<input type="checkbox"/> Addendum No. 5	<input type="checkbox"/> Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Pinnacle Actuarial Resources, Inc.

Company



Authorized Signature

April 12, 2017

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

CLIENT REFERENCES

Client:	Kentucky Office of the Reclamation Guaranty Fund
Scope:	Mine Reclamation Fund Liabilities
Date:	2012-present
Professional Staff:	John Wade, Laura Maxwell, Art Randolph
Client Contact:	Jeff O'Dell, 502-782-6724, Jeff.O'Dell@ky.gov
Client:	Ohio Department of Natural Resources
Scope:	Mine Reclamation Fund Liabilities
Date:	2009-present
Professional Staff:	John Wade, Laura Maxwell
Client Contact:	Susan Grant, 614-265-6773, Sue.Grant@dnr.state.oh.us
Client:	Virginia Department of Mines, Minerals and Energy
Scope:	Mine Reclamation Fund Liabilities
Date:	2011-2012
Professional Staff:	John Wade, Laura Maxwell
Client Contact:	Greg Baker, 276-523-8160, Greg.Baker@dmme.virginia.gov

**A Proposal to Serve the
State of West Virginia
Department of Environmental Protection
Office of Special Reclamation
RFQ DEP1700000020**

Cost Proposal

April 2017



3109 Cornelius Drive
Bloomington, IL 61704
309.807.2300
pinnacleactuaries.com

Commitment Beyond Numbers

Joseph A. Herbers, ACAS, MAAA, CERA
Managing Principal
jherbers@pinnacleactuaries.com

April 12, 2017

Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130
Attention: Ms. Jessica S. Chambers

Re: West Virginia Department of Environmental Protection, Office of Special Reclamation
RFQ DEP1700000020 – Cost Proposal

Dear Ms. Collins:

On behalf of Pinnacle Actuarial Resources, Inc., I am pleased to offer our Cost Proposal to provide the requested actuarial services to West Virginia Department of Environmental Protection's Office of Special Reclamation (Agency). We trust that you will find it in accordance with your Request for Quotation.

As Pinnacle's Managing Principal, I am empowered to bind the company to this proposal. The attached proposal is "a firm and irrevocable offer" for 120 days or as long as necessary to finalize contract details.

Please feel free to contact me or Contract Manager, John Wade, to discuss any issues or concerns or if additional information is needed. Mr. Wade's contact information can be found within the attached response.

Respectfully submitted,



Joseph A. Herbers, ACAS, MAAA, CERA
Managing Principal
309.807.2300
Enclosures

Exhibit A
Pricing Page

Actuarial Services for WVDEP Office of Special Reclamation

ITEM NO.	EST. QUANTITY	Unit	SPEC. REF. #	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1	1	Lump Sum	4.1	Actuarial Consulting Services	\$ 82,000	\$
				Total	\$ 82,000	

Firm Name: Pinnacle Actuarial Resources, Inc.