

John Wesley Powell (he, his)
Director, GS-0408-13

Center name: USGS Headquarters
Duty station: Reston, VA
Date of entrance on duty to federal service: March 1, 1881
Date of conversion to research scientist: March 10, 1881
Date of last promotion: March 30, 1885
Review Cycle: Fall 2025

Research Interests and Expertise

up to 5 keywords or brief phrases

Botany; Geology; Mapping; Whitewater rafting and adventure trips; Exploring the Western
United States

Research Environment

up to 2,500 characters, including spaces

This section is meant to be an abstract-like description of your position to provide context for panel members.

Provide a concise, summary-level, introductory statement describing your current position's purpose and your research environment, including the scope of the research you conduct (for example, topical, geographic, taxonomic), your primary collaborators, and your major sources (but not amounts) of funding. Include relevant information about your typical role on research teams (for example, principal investigator, team leader, or team member).

As applicable, document other major assignments or responsibilities, such as standing representation or committee assignments and any non-research duties. Include the percentage of time spent on these duties. This may include, for example:

- technical assistance related to an assignment, committee assignments, technology transfer, or consultation;
- facility or laboratory management;
- special assignments (for example, safety officer responsibilities); or
- substantive supervisory duties.

This should describe the duties of your position, but not include outcomes or accomplishments. Detailed lists of projects, examples of accomplishments, and other specifics are better included in the following sections. Do not include information about your physical work environment.

This section is limited to 2,500 characters, including spaces (about three-quarters of a page). If this section exceeds the character limit, your Scientist Record may be returned to you for editing, which may delay your grade evaluation.

Factor 1: Research Assignment

up to 7,000 characters, including spaces

This factor deals with the nature, scope, and characteristics of the researcher's current assignment. Award a factor level that reflects the norm of current assignments, rather than atypical projects. Research assignments are directly dependent upon the individual qualities of the researcher and the inherent difficulty of the research problems. Work commonly expands commensurate with the researcher's motivation, capability, and creativity.

Projects and Teams – For project and team members, base the factor level only on the specific projects or portion of projects for which the researcher is responsible. For project managers, base the factor level on the scope and character of the total project.

Primary Considerations – In evaluating this factor consider the following:

- assignment scope and complexity, objectives, and means of accomplishment;
- problem breadth and depth;
- availability of related research studies;
- extent to which objectives can be defined;
- number of unknowns and critical obstacles;
- variety and depth of knowledge and expertise required to solve problems;
- extent and complexity of the required validation process;
- necessity to translate abstract concepts into easily understood statements of theory or models, and to determine how best to disseminate information or transfer research findings;
- utility of the end product in solving the initial problem and in opening new areas of investigation; and
- expected impact of end results, products, or outcomes.

Factor 1 – Level A (2 points)

Research assignments have the following characteristics:

- readily definable objectives;
- limited in scope to investigating specific phenomena or problems, or are segments of related investigations;
- require fairly conventional techniques;
- involve applying existing theory or methods to areas previously investigated, but under different conditions, or involve adapting previous studies in light of changes in theory or improved techniques and instrumentation; and

- result in contributions that add to scientific and professional knowledge or support developing new or improved methods and techniques.

The researcher typically works as a project or team member.

Factor 1 – Level C (6 points)

Research assignments have the following characteristics:

- the scope is broad and complex, requiring a series of comprehensive and conceptually related phases and studies;
- problems are difficult to define;
- require sophisticated research techniques; and
- result in contributions that:
 - answer important questions in the field;
 - account for previously unexplained phenomena;
 - open significant new avenues for further study;
 - confirm or modify a scientific theory or methodology;
 - lead to important changes in existing products, methods, techniques, processes, or practices; or
 - are definitive of a specific topic area.

The researcher typically works as a project member or as a primary investigator.

Factor 1 – Level E (10 points)

Research assignments have the following characteristics:

- the scope and complexity are at a level requiring subdivision into separate phases, some of which are considerably broad and complex;
- problems are exceptionally difficult and unyielding to investigation;
- require unconventional or novel approaches or complex research techniques; and
- results may include:
 - a major advance or opening of the way for extensive related development;
 - progress in areas of exceptional interest to the scientific and professional community;
 - important changes in theories, methods, and techniques;
 - opening significant new avenues for further study; or
 - contributions answering important questions in the field.

The researcher typically works as a primary investigator but may also be a project member.

Factor 2: Supervisory Controls/Supervision Received

up to 3,500 characters, including spaces

This factor deals with the researcher's current level of independent performance and the technical and administrative guidance and control the supervisor exercises over research work. Researchers may consult frequently with colleagues and collaborators. Use caution in distinguishing between consultation and supervisory control and guidance

Primary Considerations – In evaluating this factor, consider the following:

- manner in which the supervisor assigns work;
- researcher's freedom to determine a course of action;
- researcher's opportunity for procedural innovation; and
- degree of the supervisor's acceptance of the researcher's recommendations, decisions, and final products.

Researchers working on complex team projects not divided into smaller components exercise independent performance when they:

- participate fully as a professionally responsible team member in substantive aspects of the work; and
- make contributions equivalent to independently performing more limited research projects.

Factor 2 – Level A (2 points)

The supervisor typically assigns specific problems along with general instructions on the scope and objectives of the study. The supervisor or higher management makes any decisions to discontinue work, change emphasis, or change the research plan. The researcher may suggest studies and undertake them after receiving supervisory approval. The supervisor reviews work for adequacy of method, completeness, and appropriate interpretation of results.

The researcher confers with the supervisor regarding problem definition, the relationship of the problem to the organization's broader research goals, and developing a research plan. Supervisory or managerial direction and guidance help the researcher in the critical problem definition and planning stages, but do not negate the researcher's responsibility for adequately completing these steps.

The researcher is expected to:

- assume responsibility for the study and pursue it to completion;
- solve problems ordinarily encountered in accomplishing the work with only occasional supervisory input;
- interpret results; and
- prepare entire, or sections of, reports and papers.

Factor 2 – Level C (6 points)

The supervisor may either assign a broad problem area to the researcher or allow the researcher to work with substantial freedom within an area of primary interest. The researcher has substantial freedom to identify, define, and select specific projects, and to determine the most promising research strategies and problem approaches.

The supervisor:

- approves plans calling for considerable investments of time or resources;
- makes final decisions concerning the direction of work and changes in or discontinuance of projects involving substantial research investments;
- relies on the researcher's professional judgment to such an extent that the researcher's recommendations are ordinarily followed; and
- reviews final work and reports, principally to evaluate overall results, recommendations, and conclusions.

The researcher is responsible, with little technical direction, for:

- formulating hypotheses;
- developing and carrying out the research plan;
- determining equipment and other resource needs;
- keeping the supervisor informed of general plans and progress;
- addressing novel and difficult problems requiring modification of standard methods;
- analyzing and interpreting results;
- preparing comprehensive reports of findings; and
- working with users to interpret and implement research findings or technologies,

Factor 2 – Level E (10 points)

The supervisor provides broad administrative supervision, which is generally limited to approving staffing, funds, and facilities, and to providing broad guidance on agency policies and mandates. Technical supervision is consultative in nature. Management accepts the researcher's findings as technically authoritative, as a basis for decisions, and as acceptable for review by the scientific community. The researcher, working within the framework of management objectives and priorities, is responsible for:

- formulating research plans and hypotheses;
- carrying out the project plan;
- interpreting findings and assessing their organizational and professional applicability; and
- locating and exploring the most promising areas of research in relation to agency program needs and the state of the science or discipline.

Factor 3: Guidelines and Originality

up to 7,000 characters, including spaces

This factor deals with the creative thinking, analysis, synthesis, evaluation, judgment, resourcefulness, and insight characterizing the work currently performed.

Guidelines usually consist of literature in the field, procedures, instructions, or precedents and may be adapted or modified to meet the requirements of the current assignment. Features to be considered are:

- the extent and nature of available written guides;
 - intrinsic difficulty encountered in applying guides in terms of their ready adaptability to the current assignment; and
 - the degree of judgment required in selecting, interpreting, and adapting guidelines.
- In assessing the impact of creativity in the position, consider the requirement for:
- original and independent creation, analysis, reasoning, evaluation, and judgment; and
 - originality in interpreting findings and translating findings into a form usable by others.

Factor 3 – Degree Level A (2 points)

Guideline include:

- existing theories and methods generally applicable to the research problem; or
- materials that may contain some inconsistencies, be partially defined, or provide several possible approaches to the problem.

Originality is demonstrated by:

- developing a complete and adequate research design by selecting and adapting the most appropriate approach, methods, or techniques for the problem at hand; and
- limited extension or modification of procedures or techniques, as required.

Factor 3 – Degree Level C (6 points)

Guidelines:

- consist of existing literature in the field of limited usefulness due to contradictions, critical gaps, or limited applicability; or
- are largely absent because of the novel nature of the work.

Originality is demonstrated by:

- defining elusive or highly complex problems;
- developing productive hypotheses for testing;
- developing important new approaches, methods, and techniques;
- interpreting and relating significant results to other research findings;
- developing and applying new techniques and original methods of attack to solve important problems presenting unprecedented or novel aspects;

- isolating and defining critical problem features; and
- adapting, extending, and synthesizing theory, principles, and techniques into original or innovative combinations or configurations.

Factor 3 – Degree Level E (10 points)

Guidelines are almost nonexistent in pertinent literature.

Originality and creativity are demonstrated by:

- discovering complex theory or methodology;
- contributing significantly to the development of new theory or methodology to supplant or add new dimensions to a previous framework; and
- solving problems and delivering results that markedly influence the scientific field or society.

Factor 4: Contributions, Impact, and Stature

up to 14,000 characters, including spaces

This factor focuses on the researcher's total contributions, impact, and stature as they bear on the current research assignment. It is not restricted to present and immediate past accomplishments and achievements. However, recency of accomplishment is important. Recent research or similar activity is essential to receiving full credit.

Security regulations, proprietary agreements, or other circumstances may prevent publishing research results and make it difficult to evaluate the work based on its impact on the larger professional community. Agencies should develop alternative processes to evaluate the impact of this work. In such cases, the work will have to be evaluated by means of the best possible judgment of its importance and the impact it would have if it could be published.

Contributions – The researcher's contributions reflect the knowledge, skills, and experience the incumbent brings to the position. Professional journal articles are an important product of research results for communicating scientific findings to the broader research community; however, they are not the only outlet for communicating information. Journal articles should be balanced with other forms of communication to ensure broad impact from the results of the work. Indicators of the researcher's contributions may include:

- research publications (for example, journal articles, monographs, books, reviews, agency and customer reports, models, maps, and novel interpretative materials); and
- innovations and technology transfer.

While the quantity of publications, research contributions, and professional activities represent one measurement of impact on a field, do not give undue weight to this metric. Consider primarily the quality, impact, and relevance of the researcher's contributions on the scientific community or field.

Impact – Consider whether the researcher:

- has an impact on scientific and/or societal issues;
- sets new research directions;
- develops new methods, techniques, or tools to be used by other researchers; and
- drives management and policy outcomes.

Stature – Stature is established when the researcher is recognized by the scientific field and/or society, as indicated by: requests for expert advice/consultation by other professionals and managers;

- requests to exercise leadership on research teams or projects;
- invitations to serve on advisory boards;
- requests to organize or chair committees, workshops, or symposia;
- invitations to address scientific or professional organizations;
- invitations to write synthesis papers;

- recognition by professional societies and external groups; or
- honors and awards.

A researcher in one field may move into a related field. Such a move does not change Factor 4 credit if, after a reasonably short period, the researcher will perform research work in the new field at substantially the same level of competence as before.

Factor 4 – Level A (4 points)

The researcher defines problems, performs background research, develops and executes a research plan, organizes and evaluates results, and prepares reports of findings. Work is expected to result in, or has resulted in:

- primary authorship of papers or reports filling narrow gaps in an existing framework of knowledge, to corroborate existing theory, or to report findings of limited scope; or coauthorship of a major paper or report of considerable interest to the scientific field;
- providing information and technical support on assigned research projects to collaborators and managers; and
- recognition for contributing to the project and communicating results outside the agency.

Factor 4 – Level A (12 points)

The researcher has demonstrated competence and productivity as evidenced by conducting rigorous research of marked originality, soundness, and value. Work is expected to result in, or has resulted in:

- primary authorship of publications of considerable interest and value to the field;
- conceiving and formulating research ideas supporting or leading to productive studies by others;
- products that are significant in solving important scientific problems;
- selection to serve on important committees and review panels of technical groups and professional organizations;
- recognition by the scientific community as a significant contributor to the field of study;
- acknowledgement of impact by end users as evidenced by favorable reviews or citation in the work of others;
- invitations to make presentations to professional societies and others outside the organization on technical matters and management practices in the area of specialization; and
- consultation by users and other researchers who are respected in their fields of study.

Factor 4 – Level E (20 points)

The researcher has made outstanding and significant contributions by conducting research in either a broad field or a narrow but very specialized field. The researcher's accomplishments are of such importance and magnitude that they move science forward. Research is of such

impact that other researchers must take note of it to keep abreast of developments in the field.

Work at this level includes many of the following:

- primary authorship of a number of important papers including seminal or synthesis publications, some of which have had a major impact on advancing the field or are accepted as authoritative in the field;
- contributions to inventions, designs, techniques, models, or theories are regarded as major advances and open the way for further developments or solving problems of great importance to the professional community, the organization, or the public;
- being sought as a consultant by colleagues who are themselves recognized experts in the field;
- recognition by the scientific community as an authority in the field;
- requests from highly-respected colleagues to collaborate with the researcher;
- attracting new researchers to the field;
- invitations to address or to assume a leadership role in national professional organizations and associated committees; and
- selection to lead research to solve large and complex problems.

In addition, researchers at this level typically perform a variety of advisory activities based on their scientific reputation and standing such as:

- contributing significantly to professional symposia defining the state of the discipline and new or emerging areas in the field;
- contributing to strategic research planning and program development;
- participating in major technology or information transfer activities of great importance to the scientific field, the agency, or the public; or
- participating in applying the research to important management and policy decisions

Three Significant Contributions

up to 10,500 characters, including spaces

Contribution 1

B.4 Powell JW, Smith J. 1881. Example pub 1. Awesome Journal. 14:2243-2249. <https://doi.org/10.1111/2041-210X.14156>.

Background– Describe the societal or scientific issue being addressed and, as appropriate, the stakeholders involved. Consider adding a 1-2 sentence statement explaining why you chose to include this contribution.

Role– Describe your role in the activity. Be specific.

Results– Describe the findings.

Impact– Describe the scientific and/or societal relevance of these results, how the findings or products been used by others, and what significant changes have been made based on this activity.

Contribution 2

B.5: Powell JW, Doe JB, Doe JB. 1882. Example pub 2. More Awesome Journal. 14:2243-2249. <https://doi.org/10.1111/2041-210X.14156>.

Background– Describe the societal or scientific issue being addressed and, as appropriate, the stakeholders involved. Consider adding a 1-2 sentence statement explaining why you chose to include this contribution.

Role– Describe your role in the activity. Be specific.

Results– Describe the findings.

Impact– Describe the scientific and/or societal relevance of these results, how the findings or products been used by others, and what significant changes have been made based on this activity.

Contribution 3

B.6: Powell JW, Doe J, Smith J. 1883. Example pub 3. Most Awesome Journal. 14:2243-2249.
<https://doi.org/10.1111/2041-210X.14156>.

Background– Describe the societal or scientific issue being addressed and, as appropriate, the stakeholders involved. Consider adding a 1-2 sentence statement explaining why you chose to include this contribution.

Role– Describe your role in the activity. Be specific.

Results– Describe the findings.

Impact– Describe the scientific and/or societal relevance of these results, how the findings or products been used by others, and what significant changes have been made based on this activity.

Supporting Information

A. Current and Recent Projects

A.1 Exmaple 1

- Role: Principal investigator.
- Dates: 1881.
- Funding: USGS appropriated funding.
- Description: What you did

A.2 Exmaple 2

- Role: Principal investigator.
- Dates: 1881.
- Funding: USGS appropriated funding.
- Description: What you did

B. Bibliography

ORCID: <https://orcid.org/0000-0003-4649-482X>

Google Scholar Profile: <https://goo.gl/Tolfoz>

ResearchGate Profile: https://www.researchgate.net/profile/Richard_Erickson

Web of Science Profile: <https://www.webofscience.com/wos/author/record/AAU-4957-2020>

Published Products

B.1 Powell JW. 1876. My undergrad paper's title. The Journal of Awesomeness 72:575–579. <https://doi.org/10.2193/2007-161>.

B.2 Powell JW, Advisor JQ. 1877. My graduate paper 1's title. The Journal of Awesomeness 72:575–579. <https://doi.org/10.2193/2007-161>.

B.3 Powell JW, Advisor JQ. 1877. My graduate paper 2's title. The Journal of Awesomeness 72:575–579. <https://doi.org/10.2193/2007-161>.

Start of USGS service

B.4 Powell JW, Smith J. 1881. Example pub 1. Awesome Journal. 14:2243-2249. <https://doi.org/10.1111/2041-210X.14156>.

IP-1, BAO signed 01/01/1881

Concept: 50%; Data: 75%; Interpretation: 75%; Writing: 76%

B.4.DR Powell JW, Smith J. Data supporting example publication 1. U.S. Geological Survey data release. <https://doi.org/10.5066/F7KS6PPB>
IP-2, BAO signed 01/01/1881

B.4.SR Powell JW, Smith J. Software supporting example publication 1. U.S. Geological Survey software release. <https://doi.org/10.5066/F7KS6PPB>
IP-3, BAO signed 01/01/1881

Review and Promotion: 1885 RGE Panel

B.5 Powell JW, Doe JB*, Doe JB. 1882 Example pub 2. More Awesome Journal. 14:2243-2249. <https://doi.org/10.1111/2041-210X.14156>.

* denotes undergraduate mentored.

IP-1, BAO signed 01/01/1881

Concept: 50%; Data: 75%; Interpretation: 75%; Writing: 76%

B.5.DR Powell JW, Doe JB, Doe JB. Data supporting example publication 2. U.S. Geological Survey data release. <https://doi.org/10.5066/F7KS6PPB>
IP-2, BAO signed 01/01/1881

B.5.SR Powell JW, Doe JB, Doe JB. Software supporting example publication 2. U.S. Geological Survey software release. <https://doi.org/10.5066/F7KS6PPB>
IP-3, BAO signed 01/01/1881

Last review and promotion: 1889 RGE Panel

B.6 Powell JW, Doe J, Smith J♠. 1883 Example pub 2. Most Awesome Journal. 14:2243-2249. <https://doi.org/10.1111/2041-210X.14156>.

♠ denotes postdoc mentored.

IP-1, BAO signed 01/01/1881

Concept: 50%; Data: 75%; Interpretation: 75%; Writing: 76%

B.6.DR Powell JW, Doe JB, Doe JB. Data supporting example publication 3. U.S. Geological Survey data release. <https://doi.org/10.5066/F7KS6PPB>
IP-2, BAO signed 01/01/1881

B.6.SR Powell JW, Doe JB, Doe JB. Software supporting example publication 3. U.S. Geological Survey software release. <https://doi.org/10.5066/F7KS6PPB>
IP-3, BAO signed 01/01/1881

Products approved for publication

B.7 example placeholder for numbering

Unpublished technical reports

B.8 example placeholder for numbering

Submitted manuscripts

B.9 example placeholder for numbering

C. Presentations

Invited or noteworthy presentation

C.1 Powell JW. September 1881. Cool talk title. Capitol Hill Reception. Washington, D.C.
Invited and Presented.

Last review and promotion: 1889 RGE Panel

C.2 Example talk here

Contributed presentations (since 2017)

C.3 example regular talk here.

C.4 example regular talk 3 here.

D. Professional and Scientific Service

D.1 Scientific review panels and workshops

- Workshop 1, April 2014
Venue. City.
Briefly describe if needed.

D.2 Editorial boards

- Editorial Board Member, Journal 1. 2016–Present
- Reviewing Editor, Journal 2. 2019–2021
- Associate Editor, Journal 3, 2023–present

D.3 Society Service

- Example committee 1 (2015–present)
- Example committee 2 (2010–present)

D.4 Conference planning

- Assisted in organizing Meeting 2014
- Assisted in organizing Meeting 2024

D.5 Journal referee. I typically review 1–3 journal articles per month. Most recent reviews are summarized on my Web of Science (previously Publons) Profile (<https://www.webofscience>).

[com/wos/author/record/1122397](https://www.researchgate.net/publication/31122397)). I have reviewed for the following journals (listed alphabetically):

A journal, B journal, and the C journal.

E. Academic Service

Academic appointments

- Adjunct Professor (Courtesy Appointment, no rank), University of State, Department of Awesomeness (2014-Present)

Students or postdocs advised or mentored

- Jane Done. MS graduate committee member. State University. Fall 2024–present.
- Dr. John Doe. Postdoc. Co-mentored with Jane Smith. University of State. Fall 2023–Present.
- Sarah Student, Research Intern. State School. June 2021–September 2022. Next position: Acme Inc.

Courses taught and seminars presented

E.1 A course at National Meeting. Location. January 2007.

E.2 Cool research talk. Weekly seminar. Department of Awesomeness. State University. April 2008.

Start of USGS service

E.3 Example talk.

Review and promotion: 2017 RGE Panel

E.4 Another workshop.

Last review and promotion: 2021 RGE Panel

E.5 newer workshop

E.6 Guest lecture.

F. Technical Training Provided

F.1 Smith JD and Powell JW. Training course of rafting. North American Rafting Meeting. Colorado River, CO. Full-day course. November 1881.

Start of USGS service

F.2 example item

Review and promotion: 2017 RGE Panel

F.3 example item

Last review: 2021 RGE Panel

F.4 example

G. Other mentorship

- Dr. Jane Doe, Faculty on sabbatical learning about occupancy modeling and applied Bayesian statistics. Also, I assisted Dr. Doe is using USGS data for teaching and education outreaching including high-school students, college students, graduate students, and continuing education for middle and high school teachers. State school. Fall 2019.

H. Awards and Recognition

- Award 1.
- Award 2.

I. Special Assignments

None.

J. Inventions and Patents

None.

K. Outreach and Media Coverage

K.1 Outreach

- Example 1.

K.2 Media coverage

- Example 1

L. Previous Professional Positions

Overview if needed. Otherwise, list positions.

- Geologist (GS-0482-11) January 1877–April 1878
- Adventurer (GS-0401-11) June 1878–January 1881

M. Education

- University, Doctorate of Philosophy, August 2013
Major: Rocks, Minor: Botany
- University, Masters of Science, August 2009
Major: Rocks
- University of State, Bachelors of Science, May 2007
Majors: Rocks and Water, Minor: Fish

Privacy Act Notice:

Pursuant to Section 3(e)(3) of the Privacy Act of 1974 (Public Law 93-573), the individual furnishing information on this form is hereby advised as follows: 1. The authority for solicitation of the information is 5 USC 552(a). 2. The principal purpose for which the information is intended to be used is for the U.S. Geological Survey research and development peer panel review process. 3. The routine disclosure of the information is to scientific, management and administrative staff who are participants in the peer review process or who are in the human resources office. 4. The effect on the individual of not providing all or any part of the requested information is not having an up-to-date Research and Development Scientific Record for peer review thereby resulting in a delayed or no peer review. 5. This record and information in this record may be used by the Federal government in connection with the hiring of an employee, the issuance of a security clearance, the conducting of a security or suitability investigation of an individual, the classifying of jobs, the letting of a contract, and the issuance of a license, grant, or other benefits or awards to the extent that the information is relevant and necessary.

REFERENCES

Mr. Fancy Pants
Center Director
555.123.4567
fpants@usgs.gov
Relationship to you: Center Director

Dr. I.B. Important
Supervisory Supervisor
555.123.4567
ibimportant@usgs.gov
Relationship to you: Supervisor/Branch
Chief

Ms. Their Name.
Title 555.123.4567
name@state.gov
Relationship to you: Program coordinator/collaborator. Describe impact of research.

Ms. Their Name.
Title 555.123.4567
name@state.gov
Relationship to you: Program coordinator/collaborator. Describe impact of research.