Quality Management Plan

for the Puget Sound Partnership

April 2014

PugetSoundPartnership

LEADING PUGET SOUND RECOVERY

Approvals

Executive Director Approval

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Sheida Sahandy, Executive Director   Date

Quality Manager Approval

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Tracy Collier, Quality Assurance Manager   Date

EPA Region 10 Project Officer

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Chris Castner, Puget Sound Team Lead   Date

EPA Region 10 Quality Assurance Manager Approval

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Gina Grepo-Grove,   Date
EPA Region 10 Quality Assurance Manager

Deputy Director Concurrence

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Marc Daily, Deputy Director   Date

Assistant Director Concurrence

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Alana Knaster, Assistant Director   Date

Science Program Concurrence

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Tracy Collier, Science Director   Date

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Jeanette Dorner, Program Director   Date

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Bill Kammin, Ecology Quality Assurance Officer   Date

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Purpose of the *Quality Management Plan*

The Puget Sound Partnership is charged with overseeing the restoration of Puget Sound. This work requires the Partnership to compile, assess, collect, and report on environmental and other data and technical information, and also use data and technical information to inform the public, make decisions, recommend actions, measure performance, and track implementation. The Puget Sound Partnership *Quality Management Plan* describes the agency's processes and policies to ensure that the quality of the data and technical information is commensurate with the actions and decisions undertaken by the Partnership.

This plan applies to all Partnership staff, contractors, and grant recipients.

Chapter 1: Introduction

1.1 Background

The Puget Sound Partnership (PSP) *Quality Management Plan* (QMP) is a key component of the quality system established in PSP's policy 700-A, *Establishing Quality Assurance* (Puget Sound Partnership, 2013). This policy can be found in Appendix A.

The QMP enhances the credibility and defensibility of PSP products. It is required of all recipients of EPA funding that is intended to "produce, collect, or use environmental data on behalf of EPA." (*Draft Handbook for Preparing Quality Management Plans*, 2012, p.1). PSP also expands the scope of the QMP to govern collection and use for data and technical information that addresses major policy issues, such as human behavior, finance, and performance.

PSP has based its *Quality Management Plan* on EPA's *Draft Handbook for Preparing Quality Management Plans*, 2012. The *Quality Management Plan* addresses the requirements of CIO Standard 2106-S-02, which addresses how "non-EPA organizations operating under an external agreement with EPA [are] to develop, document, and implement a Quality Management System that conforms to applicable EPA policies and procedures".

1.2 Objectives

PSP's Quality Management System (QMS) is intended to ensure that the data that the agency uses in its decision-making processes has known and documented quality and is being used appropriately. PSP's QMS is also intended to ensure that all relevant documents and publications produced by PSP meet the established quality standards. This plan lays out how PSP will plan, implement, and assess the effectiveness of our Quality Management System. It also documents the roles and responsibilities of PSP's staff.

The other element of the QMS is the QAPP process, described in Chapter 5 of this plan, and in the forthcoming *Puget Sound Partnership QAPP Guidelines* (intended for publication in Spring 2014).

PSP uses a graded approach to quality management, described by the Washington State Department of Ecology as an approach "in which projects of different sizes, levels of risk, and rigor call for differing approaches to QA documentation. Generally speaking, the larger the project and the more call for risk it carries, the more detailed and rigorous the quality documentation should be." (*Quality Management Plan*, Washington State Department of Ecology, October 2010).

1.3 Intended Audience

The intended audience for this *Quality Management Plan* includes:
- PSP staff with roles described in Section 3.2 and identified in Appendix B, the organizational chart
- PSP staff that generate or analyze data and technical information, model the environment, or use data and technical information as part of any analysis, communication, or decision-making process.
- PSP contractors and grant recipients who work with data and technical information

More general audiences with an interest in environmental decision making related to Puget Sound will likely be part of the readership of this plan.

1.4 Supersession

This document is the first PSP *Quality Management Plan* and supersedes all previous agency documentation prepared on quality.

1.5 Period of Applicability

The period of applicability for this *Quality Management Plan* is five years from the date of publication. At the end of that period, Puget Sound Partnership will do one of the following: reissue the QMP without changes, revise and reapprove the QMP, or rewrite the QMP.

1.6 Conformance

This Quality Management Plan conforms to (or is consistent with):

- ISO 9001 (Current Edition), *Quality Management Systems – Requirements* [ISO 2008]
- *Uniform Federal Policy for Implementing Environmental Quality Systems*
- (EPA-505-F-03-001) (Current Edition) [EPA 2005]
- CIO Standard 2106-S-02.
- Draft Handbook for Preparing Quality Management Plans, 2012
- EPA, 2013. Policy to Assure the Competency of Organizations Generating Environmental Measurement Data under Agency-Funded Assistance Agreements. http://www.epa.gov/fem/pdfs/competency-policy-aaia-new.pdf

1.7 Legal Basis for PSP's Quality Assurance Program

EPA requires PSP to document its quality system in an approved Quality Management Plan, per the requirements of CIO Standard 2106-S-02, which addresses how "non-EPA organizations operating under an external agreement with EPA [are] to develop, document, and implement a Quality Management System that conforms to applicable EPA policies and procedures".

Chapter 2: Quality Management System Guidelines

2.1 Policy
PSP's *Quality Management Plan* is based on EPA and PSP policy. The *Draft Handbook for Preparing Quality Management Plans* (2012) states that any environmental data generation funded by EPA must be performed using an appropriate quality management plan. PSP Policy 700-A, *Establishing Quality Assurance*, requires the development of QAPPs for all generation or quantitative analyses of environmental data by PSP or PSP's contractors or grant recipients. Those parties will collect data and technical information using standard operating procedures or documented protocols, and share those standards with PSP prior to doing the work.

Any field and laboratory work performed on behalf of PSP will conform with the following policies:
- EPA, 2011. Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions http://www.epa.gov/fem/pdfs/fem-lab-competency-policy.pdf
- Ecology, 2008a. Policy 22-02, Requiring Use of Accredited Environmental Laboratories. Washington State Department of Ecology, Olympia, WA. http://www.ecy.wa.gov/programs/eap/qa/docs/pol22-02.pdf

2.2 Purpose
The *Quality Management Plan* is intended to ensure that data and technical information that are generated or analyzed by PSP, or by contractors or grant recipients on behalf of PSP, are of documented and appropriate quality and usability. PSP's quality system touches many aspects of agency operations including:
- Project planning (QAPPs and other project plans)
- Document development (major reports and SOPs)
- Data management and GIS
- Purchasing and contracting
- Field sampling and analytical procedures

2.3 Applicability
PSP's *Quality Management Plan* is applicable to all PSP staff that generate or analyze data and technical information, model the environment, or use data and technical information as part of any analysis, communication, or decision-making process. It also applies to PSP contractors and grant recipients who perform the same work on behalf of the agency.

2.4 General Content and Detail Requirements
The required contents of all *Quality Management Plans* are defined by EPA (2012). PSP has complied with the requirements laid out in the *Draft Handbook for Preparing Quality Management Plans*, 2012.

2.5 Preparation
PSP's Executive Director is responsible for the preparation of the *Quality Management Plan,* and can delegate that responsibility to the QA Manager or QA Assistant at his or her discretion.

2.6 Submission and Approval
The *Quality Management Plan* must be approved by the following:
- Executive Director of Puget Sound Partnership
- The Quality Manager of Puget Sound Partnership
- EPA Region 10 Quality Assurance Manager

2.7 Plan Revisions
Per EPA requirements, PSP will formally revise the *Quality Management Plan* on a five-year cycle. However, PSP reserves the right to review and update the *Quality Management Plan* as needed to address changes in work or mission, changes in roles and responsibilities, the results of audits or assessments, or any other significant changes or assessments within the agency.

2.8 Self-Assessment & Improvement
The effectiveness of the quality system is continuously evaluated. Available assessment tools include data quality assessments, peer reviews and technical reviews, proficiency testing studies, and technical systems audits. Technical audits and assessments (1) provide management with tools to determine whether data collection activities are implemented as planned, and (2) are the basis for taking action to correct any deficiencies that are identified.

The project manager is responsible for assuring that data quality (or usability) assessment is done for each project that involves environmental data. Data quality assessment is a statistical and scientific analysis and evaluation of data to determine if data are of the right type, quality, and quantity to support their intended use. A recommended reference is EPA Document QA/G-9, *Guidance for Data Quality Assessment: Practical Methods for Data Analysis.*

Prior to initiating internal assessments, PSP management is responsible for identifying goals, choosing the assessors, defining acceptance criteria, determining the assessment procedures to be used, and approving check lists. Every year, the Executive Director and the QA Manager will assess the adequacy of the quality system; every three years, they review the *Quality Report to Management*. Reports of assessments are prepared and submitted to management. When the assessment findings identify conditions needing corrective action, management responds promptly and appropriately. Corrective actions are documented by the responsible persons in order to confirm the implementation and effectiveness of the response action. Senior management is responsible for addressing any disputes concerning the assessments.

The QA Manager keeps the Executive Director informed of QA accomplishments and any problems that arise. The QA Manager discusses any relevant QA issues or problems with the appropriate Program Manager and/or program QA Coordinator.

The QA Assistant prepares a status report, *Quality Report to Management*, every three years. This report contains, as a minimum, the following information:
- A description of QA/QC training received by PSP staff.
- A description of technical assistance and QA/QC support provided to PSP staff.
- Significant problems related to data quality and recommended corrective actions.
- A description of the status and needs of documented information on QA/QC.
- A description of the status and needs of human resources to implement the quality system.

- A review of PSP's *Quality Management Plan* to determine if the approved quality management practices continue to be both suitable and effective.
- Other information specifically requested by management.

Chapter 3: Quality Management Plan Essentials

3.1 Content Requirements
The *Draft Handbook for Preparing Quality Management* Plans (2012, pp. 10-36) contains requirements for quality management plan content and format. PSP has written this document to address the topic areas in that document.

3.2 Organization, Responsibility, and Authority
Policy 700-A, adopted August 9, 2013, applies to data generation and analysis conducted or funded by PSP. It is the responsibility of PSP management to promote the commitment to data and technical information quality laid out in that document, and the responsibility of all PSP staff to ensure that colleagues, partners, contractors, and grant recipients adhere to those commitments. A copy of the policy is included as Appendix A.

3.2.1 Executive Director. PSP's Executive Director has ultimate responsibility and authority for the Quality Management System. The Executive Director:
- Serves as a champion of the Quality Management System
- Ensures that the Quality Management Plan updated every five years
- Reviews and responds to findings of the QA Manager as required
- Ensures that quality management positions are filled by qualified staff who are supported by their management chain
- Actively participates in specific Quality Management System functions such as training and assessments
- Builds quality-related commitments into the organization's employee performance appraisal system

3.2.2. Assistant Director. PSP's Assistant Director is responsible for coordinating and conducting, when necessary, audits of agency QA operations and project reports.

3.2.3 Quality Assurance Manager. PSP's Quality Assurance (QA) Manager, who is designated by PSP's Executive Director, coordinates major QA activities throughout the agency. The QA Manager role is held by PSP's Science Director. The role of the QA Manager is independent of his or her other roles and responsibilities within the agency, and the QA Manager reports only to the Executive Director on quality issues.

The QA Manager (or his or her designee) is responsible for:
- The development of the *Quality Management Plan*, as delegated by the Executive Director
- Acting as chief QA liaison for inquiries, both internal and external to PSP, regarding the agency's Quality Management System
- Leading a QA Team, made up of the QA Coordinators as described in section 3.2.5, in reviewing quality-related decisions on at least a semi-annual basis, or more frequently if necessary
- Frequent communication with staff working on quality issues to ensure that technical processes are understood and being followed and prevent the development of conditions that are adverse to quality
- If corrective actions are required, the QA Manager directs those corrective actions to be taken in a timely fashion, confirms the implementation and effectiveness of those actions, and

documents as required. This can be done with assistance from the Executive Director and Assistant Director if necessary.

- Identifying, developing, and approving any necessary SOPs
- An annual meeting with the Executive Director regarding the Quality Management System and any necessary updates, and informing the Executive Director of QA/QC issues on an ad-hoc basis as needed
- Reviewing the three year *Quality Report to Management* and taking action as needed

The QA Manager has work-stop authority when reports contain demonstrable errors.

3.2.4 QA Assistant. PSP's Quality Assurance (QA) Assistant, who is designated by PSP's Executive Director, coordinates minor QA activities throughout the agency. The QA Assistant is responsible for:
- Assisting PSP staff with preparing documents involving the application of the QA and QC principles
- Coordinating training on QA and QC principles and practices to meet the needs of PSP staff
- Preparing a *Quality Report to Management* every three years

3.2.5 QA Coordinators. Managers for PSP's data- and-technical-information involved programs, including the Finance Team, Information Technology Team, Science Team, Performance Management Team, The Ecosystem Recovery Team, and Sound-wide and Functional Programs Team must each delegate one Quality Assurance (QA) Coordinator for their programs. The QA Coordinators are responsible for:
- Acting as point of contact within their programs for data and technical information quality on issues
- Coordinating with the agency QA Manager to identify needs related to QAPP preparation and SOP preparation and maintenance
- Assisting the NEP Quality Coordinator with review and approval of QAPPs prepared within their programs
- Assisting project managers who oversee the preparation of QAPPs submitted to PSP by responsible parties, contractors, and grant recipients
- Assisting program staff and grant recipients in meeting QA/QC requirements
- Providing technical assistance to program staff who implement QAPPs and assess the quality of the results obtained
- Assisting the QA Assistant with preparing and presenting QA/QC training for program staff
- Providing information to the QA Assistant for the *Quality Report to Management*

3.2.6 NEP Quality Coordinator. Currently, the NEP Quality Coordinator, who is under contract with PSP from Ecology, will review and sign QAPPs. This position will also serve as technical advisor on quality questions. As PSP's quality system evolves, this work might be assigned to a PSP staff member, for example, the QA Manager.

3.2.7 Project Managers, Project Leads, and Contract Managers. Project managers and project leads have overall responsibility for both specific environmental studies, as well as activities conducted through grants or contracts. They may be responsible for any of the following:
- Preparing QAPPs
- Assisting contractors, grant recipients, and the regulated community with preparing QAPPs
- Reviewing and approving QAPPs prepared by grant recipients and contractors

- Implementing QAPPs, or overseeing the implementation of QAPPs managed by grant recipients and contractors
- Assessing and reporting the quality of data and technical information, based on the quality objectives

3.2.8 QAPP Manager. The QAPP Manager is responsible for overall development and refinement of QAPPs and other project plans for the agency. The QAPP Manager:
- Serves as a resource to QA coordinators and PSP project managers on the development and implementation of QAPPS
- Writes and updates the *Puget Sound Partnership QAPP Guidelines*
- Is responsible for the work detailed in the *QAPP Guidelines*

3.3 Organization Chart
The organization chart in Appendix B presents the roles and lines of authority per the Quality Management System in PSP.

3.4 Dispute Resolution
This section details the process that PSP will follow in the event that there is a dispute over the application of the Quality Management System.

Oversight responsibilities for QA/QC may result in disagreements between the oversight group and the program reviewed. Such disputes may occur in situations involving technical issues (e.g., quality requirements, assessments, audits, surveillance, data and technical information quality (usability) assessments, publications) and management issues (e.g., *Quality Management Plan* reviews, management system reviews).

All parties should make every effort to resolve disputes through discussion and negotiation. If the parties are unable to resolve the dispute, this dispute resolution process should be followed:

1. The process begins when either disagreeing party declares an issue to be unsolvable and sends a memorandum to the other party invoking this dispute resolution process, defining the disputed issue, and presenting supporting arguments for the first party's position on the issue.

2. Within 15 days, the second party must send a draft dispute resolution package to the first party.

3. As soon as possible after this, the two parties, working together, must submit a dispute resolution package to the NEP Quality Coordinator and the Assistant Director. This package would contain all relevant arguments, relevant rebuttals, and any supporting materials.

4. The NEP Quality Coordinator and the Assistant Director shall schedule a meeting for resolving the dispute within 15 days from receipt of the dispute resolution package, and notify both parties of this date. Both parties are invited to attend the resolution meeting to present arguments and answer questions. Management may get advice from a third party.

5. If the issue cannot be resolved at this level, the Executive Director, in consultation with the NEP Quality Coordinator, QA Manager, and the Assistant Director, will make the final decision on disposition of the issue. If the quality dispute involves the QA Manager and/or the Assistant

Director, they will not participate in the final management decision. The final decision of management shall be binding on both parties.

Staff, contractors, and/or grantees involved in a dispute over the application of the Quality Management System should ensure that the dispute is:
- Fully documented
- Resolved at the lowest level possible
- Brought to the attention of management if necessary
- Subsequently tracked to ensure that involved parties adhere to the agreed-upon resolution

3.5 Training
It is crucial that all Partnership management and staff who work with data and technical information – whether in producing, managing, or using data and technical information for decision-making – are aware of the Quality Management System. Staff should be knowledgeable in:
- The content of the QMP
- Technical aspects of QAPPs
- Quality Assessment
- Quality Control
- Up-to-date training in relevant technical fields

The Quality Assurance Assistant is responsible for Quality Management System training at PSP. Training resources can be procured from both inside and outside the agency. Staff are required to renew their QMS training every three years. QMP trainings will include:
- Formal introduction to the Quality Management System, as described in this QMP
- Preparation of QAPPs
- Quality Assessment and Quality Control
- The Peer Review process

Any updated Performance Development Plan (PDP) will include a training plan for relevant quality training, as appropriate. In addition, staff members are encouraged to seek additional training in statistical methods, GIS methods and analysis, research design, data analysis, and other aspects of data and technical information development, management, and analysis relevant to their work.

3.6 External Contractors and Grantees
PSP is responsible for ensuring that its contractors and grantees follow the appropriate quality measures outlined in the *Quality Management Plan*. Functions that PSP is most likely to contract for that would be subject to the quality system include:
- Data collection
- Data analysis
- Information technology support
- Other functions as needed, per the agency's discretion

For the above-listed functions, as needed, PSP will require contractors and grantees to:
- Prepare their own QAPPs as needed
- Develop SOPs for necessary processes and practices
- Commit to fulfilling specific QA and QC requirements, and demonstrate their application
- Make all original and derived data available to PSP staff for review, as requested

- Submit to audits as requested, or conduct audits of sub-contractors
- Validate data supplied by contract laboratories or other sub-contractors, as necessary or required.
- Issue stop-work orders or requests for corrective actions to sub-recipients

3.7 Planning

Data QA begins with careful planning. The goal and specific objectives for the environmental project are clearly defined, including how the data will be used. Then quality objectives, as well as qualitative and quantitative statements about the data needed to support decisions or regulatory actions, are developed. Finally, the methods to collect samples, make measurements, document data quality, and interpret and report results are selected or developed.

A systematic planning process is recommended. Systematic planning is a process in which the Partnership identifies the problem to be studied and/or the decision to be made. Staff then define the project's objectives; the type, quantity, and quality of information needed; the technical and QC activities; and the level of oversight that will ensure project criteria are satisfied. Additional information on systematic planning processes can be found in the following documents: *Guidance for the Data Quality Objectives Process* (EPA, 2006) and *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies* (Lombard and Kirchmer, 2004).

Preparing a QAPP helps ensure that the project manager follows a systematic planning process. The completed plan (1) facilitates communication among managers, staff, and contractors performing field or laboratory research to implement the project, (2) promotes consistency in data collection activities, and (3) provides the basis for project reports.

The forthcoming *Puget Sound Partnership QAPP Guidelines* (intended for publication in Spring 2014) will provide the project managers with guidance for preparing QAPPs for PSP projects.

Program-specific guidance documents (e.g., standard operating procedures or SOPs) are prepared, when needed, to address the unique QA requirements of Puget Sound Partnership programs.

Chapter 4: Quality Management System Description

The following business functions of the Puget Sound Partnership will adhere to the quality assurance methods as described. As discussed in section 2.7 of this plan, we are on a five-year cycle for updating the QMP and its underlying Quality Management System. However, PSP reserves the right to review and update the *Quality Management Plan* and Quality Management System as needed to address changes in work or mission, changes in roles and responsibilities, the results of audits or assessments, or any other significant changes or assessments within the agency.

4.1 Science
The PSP Science Program undertakes and commissions a variety of project types to develop and implement a strategic science program for the Puget Sound Partnership. For quality assurance purposes, this plan identifies four types of science projects.

4.1.1 Projects that involve collection or analysis of environmental data, or environmental modeling
These projects will adhere to the following quality assurance methods:
- QAPPs, as discussed in Chapter 5 and the forthcoming *Puget Sound Partnership QAPP Guidelines* (intended for publication in Spring 2014), will be developed by or under the direction of the PSP project manager and submitted to PSP's quality manager for review and approval.
  - For EPA-funded but non-NEP projects, QAPPs will be submitted to the EPA Region 10 Quality Assurance Manager for review and approval.
  - For NEP-funded projects, QAPPs will be submitted to the NEP Quality Coordinator for review and approval

    Data collection and analysis will not begin until all approvals have been obtained.
- Data collection and analysis will be conducted by PSP Science staff, contractors, or others per the methods specified and to meet the project and quality objectives described in the QAPP.
- Per PSP's *Guidelines for Scientific Review* (Hamel and Currens, 2012), the PSP project manager will consult with the PSP Science Director to plan an appropriate scientific review for the product.
- The PSP project manager will coordinate with the PSP Science Director and the Science Panel (or their designee) as appropriate to support the scientific review and to ensure that a final product is developed that is responsive to the review.
- The PSP project manager will coordinate with the PSP Science Director, PSP's communications team, and other colleagues as appropriate to develop and follow an appropriate approach for technical editing, fact checking, and policy and stakeholder review.

Assignments in statute to PSP's Science Panel and Executive Director do not include any projects that necessarily involve collection or primary analysis of environmental data by PSP. PSP Science may undertake or commission investigations to address priority science activities in the biennial science work plan; these projects may fall under this section and, if so, would require a QAPP be developed and approved. For example, PSP might commission an investigation, including collection of data about fish condition, into the causes of reduced marine survival of a salmonid species.

4.1.2 Projects involving the collection or analysis of other types of data, policy review and analysis of environmental data, or modeling of non-environmental parameters
Projects that involve collection or analysis of data but do not fall within the definitions of projects needing a QAPP will adhere to the following quality assurance methods:

- The PSP project manager will consult with the PSP QA Manager to determine the need for and approach to developing a project plan to specify:
    - project objectives, organization, and responsibilities
    - sources of data (and data collection approaches if applicable)
    - quality requirements of the data
    - procedures for data reporting, reduction, and validation
- If deemed appropriate by the PSP QA Manager (e.g., when PSP is collecting data or conducting novel analyses of data), a project plan will be developed by or under the direction of the PSP project manager and submitted to PSP's quality manager for review and approval. Data collection and analysis will not begin until this approval has been obtained.
- Data collection and analysis will be conducted by PSP Science staff, contractors, or others to meet project objectives and as described in the project plans (if appropriate).
- Per PSP's Guidelines for Scientific Review (Hamel and Currens, 2012), the PSP project manager will consult with the PSP Science Director to plan an appropriate scientific review for the product.
- The PSP project manager will coordinate with the PSP Science Director and the Science Panel (or their designee) as appropriate to support the scientific review and to ensure that a final product is developed that is responsive to the review.
- The PSP project manager will coordinate with the PSP Science Director, PSP's communications team, and other colleagues as appropriate to develop and follow an appropriate approach for technical editing, fact checking, and policy and stakeholder review.

Assignments in statute to PSP's Science Panel and Executive Director include development of three products that might fall under this section:
- Puget Sound Science Update (RCW 90.71.290)
- Biennial Science Work Plan (RCW 90.71.290)
- State of the Sound sections on comments from the Science Panel on progress in implementing the plan and findings from ecosystem monitoring and assessment (RCW 90.71.370(3))
- Reports on the identification and evaluation of ecosystem indicators.

However, as currently envisioned, none of these documents involves collection or novel analysis of data, so it is unlikely that a QAPP will be produced for these products.

PSP Science may undertake or commission investigations to address priority science activities in the Biennial Science Work Plan. Such projects may fall under this section and would likely require development and approval of a project plan (which may be equivalent to a QAPP). For example, PSP is undertaking a project to assess ecosystem pressures by eliciting expert judgments about ecosystem vulnerabilities and the strength of pressures.

4.1.3 Projects that do not involve data collection or analysis
A great amount of the work performed by PSP Science occurs in projects that do not involve the collection or analysis of data. For these projects, PSP science will adhere to the following quality assurance methods
- Following PSP's Guidelines for Scientific Review (Hamel and Currens, 2012), the PSP project manager will consult with the PSP Science Director to plan an appropriate scientific review for the product.

- The PSP project manager will coordinate with the PSP Science Director and the Science Panel (or their designee) as appropriate to support the scientific review and to ensure that a final product is developed that is responsive to the review.
- The PSP project manager will coordinate with the PSP Science Director, PSP's communications team, and other colleagues as appropriate to develop and follow an appropriate approach for technical editing, fact checking, and policy and stakeholder review.

Examples of PSP Science projects and activities that fit this category include:
- Documents describing PSP's Strategic Science Program (e.g., 2010 version of Strategic Science Plan).
- Reports from Puget Sound Ecosystem Monitoring Program (PSEMP) or its work groups on inventories of existing monitoring, priorities for monitoring, and monitoring gaps.

4.1.4. Projects that focus on public awareness, education, and outreach.
All public awareness, education, and outreach research shall comply with the *Code of Professional Ethics and Practices* and the *Best Practices for Survey Research* of the American Association for Public Opinion Research. This work is furthered governed by the principles identified in section 4.1.2 of this plan.

4.2 Planning and Performance Management
4.2.1 Report Card (Near Term Action [NTA] Tracking)
Report Card data consists of status and financial updated for Near Term Actions. This information comes from the NTA owners themselves – generally, they are state, federal, local agencies, Tribes, or non-profits. This information is fact-checked through performance measures and in-person reports to the Leadership Council. PSP accepts that, for the time being, this information is essentially unverifiable beyond those steps, and that we have to trust that our partners supply us with accurate information. We hope that this work can evolve to be more verifiable in the future.

4.2.2 Aligning State Budget Proposals with Action Agenda
This alignment follows a set of written rules that operates as a methodology. PSP assigned points to a proposal based on the strength of its association with the Action Agenda, the importance of the sub-strategy with which it is linked, and whether or not it is a strategic initiative, among other criteria. These criteria is documented and the point assignments can be re-created.

4.2.3 State of the Sound
The biennial State of the Sound report relies on data from other sources identified in this document: the Vital Signs, the Report Card, Near Term Action financial data, and the stewardship program. Quality assurance methods are documented under those items.

4.2.4 Action Agenda
The development of the Action Agenda is vetted through a comprehensive review process that involves the Puget Sound Leadership Council, the Ecosystem Coordination Board (ECB), the Science Panel, and a public involvement process. The information will be fact-checked by PSP staff and external reviewers. The document is essentially programmatic in nature, hence there is not a great deal of source data to review and verify. The document is primarily intended to provide policy direction and establish priority actions.

4.2.5 EPA National Estuary Program (NEPORT) report

The Partnership issues guidance and a template for data entry to its partners, and internal PSP staff, to explain the habitat project information that is required. For some of the larger projects PSP staff do qualitative research to check project information provided. To a large extent, PSP relies on its Partners to provide accurate information as per the guidance that they receive. The majority of the NEPORT habitat data is sourced from Washington Recreation and Conservation Office's PRISM database. PSP does not itself seek to verify this source data, instead leaving RCO to carry out its own database quality control measures. Once submitted to NEPORT the projects are then reviewed by EPA region 10. Once approved by EPA region 10, EPA HQ review and apply final approval. At any stage during EPA review projects can be returned to PSP for clarifications and/or additional information.

4.3 Financial Data

PSP collects financial information about each Action Agenda Near Term Action on an annual basis. PSP met in person with reporters, and issues detailed guidance on how to prepare the financial data. PSP staff carried out checks on each entry to find common mistakes, and instances where the guidance had not been followed. PSP asked NTA owners to state their methodologies clearly to make verification of the numbers easier; the data was then extracted and twice verified with state agencies. PSP's senior management, OFM, the ECB and the Leadership Council will all have a chance to review the financial information before it is published in the *State of the Sound* report.

PSP accepts that, for the time being, this information is essentially unverifiable beyond those steps, and that we have to trust that our partners supply us with accurate information. We hope that this work can evolve to be more verifiable in the future.

4.4 Contracting and Grant Processes

The Puget Sound Partnership's (PSP's) Finance Division is responsible for the contracting and purchasing processes of the agency. This includes developing performance-based scope of works; identifying vendor contracts versus federal sub awards; developing Request for Proposals for competitive contracts and awards; designating direct awards; and processing interagency agreements. The Grants, Contracts, and Compliance Manager (GCCM) oversees the internal contracting and purchasing processes of the agency to ensure compliance with state law (Chapter 43.19 RCW) and federal regulations regarding sub awards. The Washington State procurement & Contracting policies contained in Appendix F, and the Delegation of Authority (RCW 39.26.090) in Appendix G, address in more detail the guidelines that Puget Sound Partnership follows.

4.5 Geographic Information Systems

The Puget Sound Partnership (the Partnership) initiated a GIS program in early 2013 to address the growing need for and use of geospatial data and maps within the agency. The working document *Puget Sound Partnership GIS Program and Standards* (Appendix D) provides as an executive summary of the policies and procedures for the Partnership's GIS program to address the quality assurance, quality control, and other technical activities that the Partnership will implement to ensure our commitment to performance standards (EPA 2003). (Planned adoption in 2014) The Partnership will maintain this working detailed GIS Program documentation, as well as project specific documentation and, when necessary, QAPPS for more complex projects on the Partnership's website starting in early 2014.

4.6 Information Technology

Information Technology provides the technical support necessary for the dissemination of data and information in support of the agency's mission. Puget Sound Partnership adheres to security,

procurement, and standards set by the Washington State Office of the Chief Information Officer (OCIO), the Washington State Department of Enterprise Services (DES), and the agency's own internal policy. Key guiding documents and policies include:

- Washington State IT Security Standard No. 141.10: Securing Information Technology Assets http://ofm.wa.gov/ocio/policies/documents/141.10.pdf
- IT Security Plan for the Puget Sound Partnership (see Appendix E)
- DES provides oversight of agency purchasing authority and procedures. PSP follows DES's Procurement Policies http://des.wa.gov/about/pi/ProcurementReform/Pages/Policies.aspx.

Staff also meets regularly with OCIO and DES oversight consultants. Please see Washington State OCIO oversight policies and standards (Appendix E) for more information on the policies that govern Information Technology at PSP.

4.7 Records Management
PSP will ensure that all formats of the agency's records are managed for their entire lifecycle to achieve:

- Easy access
- Security
- Legal and regular disposition
- Reduced liability
- Documentation of past performance

All Puget Sound Partnership employees are custodians of Puget Sound Partnership records and must manage them according to state standards, regulations, and Puget Sound Partnership policy and procedure. This includes electronically stored information.

All employees must take Records Management training. When an employee leaves a job, the supervisor takes over managing the records until another employee assumes responsibility. All employees are responsible for keeping records organized and up to date, for segregating records exempt from public disclosure, and for assisting with producing records in the future.

PSP's records management guidelines are outlined in Policy A-500, *Agency Records Management and Retention (Appendix C).* As appropriate, projects generating new environmental data will be formatted for and submitted to Ecology for entry into the agency's EIM database.

4.8 Standard Operating Procedures
Currently, Puget Sound Partnership does not have any Standard Operating Procedures (SOPs). The Assistant Director will determine the need for SOPs, and set guidelines for how they will be prepared and maintained. For PSP, SOPs might not be limited to field or lab procedures, but might address contracting, fiscal, GIS, public outreach/survey activities, purchasing, etc.

Chapter 5: QAPPs and other Project Plans

PSP's QAPP policies will be detailed in the forthcoming *Puget Sound Partnership QAPP Guidelines* (intended for publication in 2014). In the interim, PSP will follow the guidelines and processes presented by the Washington State Department of Ecology for development of QAPPs for the National Estuary Program (NEP) presented online at:
http://www.ecy.wa.gov/programs/eap/qa/docs/nepqapp/index.html

As recommended in the NEP guidelines and processes, PSP will consult Ecology's Guidelines for Preparing QAPPs for Environmental Studies, which is available at:
http://www.ecy.wa.gov/biblio/0403030.html

For studies requiring project plans as discussed in section 4.1.2, PSP may follow the QAPP guidelines or may follow other relevant guidelines (e.g., EPA risk characterization handbook and information quality guidelines).

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Washington State Department of Ecology for development of QAPPs for the National Estuary Program
(NEP) presented online at: http://www.ecy.wa.gov/programs/eap/qa/docs/nepqapp/index.html

Appendices

Appendix A: Puget Sound Partnership Policy 700-A Establishing Quality Assurance
Appendix B: Puget Sound Partnership Org Chart showing QMS roles & responsibilities
Appendix C: Records Management Policy
Appendix D: Puget Sound Partnership GIS Program and Standards [working document]
Appendix E: Washington State OCIO oversight policies and standards
Appendix F: Washington State Procurement & Contracting Policies
Appendix G: Delegation of Authority (RCW 39.26.090)