Instructions for Completing RM&E Reports October 2012

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I. Purpose and Overview

Two recent evaluations of research, monitoring and evaluation (RM&E) aspects of Bonneville Power Administration's (BPA) fish and wildlife program found key areas for improving the usefulness of annual reports on RM&E projects. The Northwest Power and Conservation Council's (Council) 2011 RM&E categorical review called for standardized annual reporting formats. Similarly, a second assessment funded by BPA reviewed existing monitoring results and noted the program would benefit from a standardized approach to annual reports, including uniform measurements and reporting.

We are asking for your help in adopting a new annual reporting system for your Research, Monitoring & Evaluation results that should be simpler and more efficient for both of us. It includes a standard report template that makes better use of information already in our system, reducing demands on you. It will also help us more effectively compile results and better describe just how much we are learning from your work.

This is important for BPA, sponsors and for the region. By demonstrating together that RM&E activities produce valuable results that inform and help tailor salmon recovery, we can help justify the continued investments required to keep the work going and the results coming.

We know that writing reports is time consuming and rarely fun. Part of the challenge is that sponsors have had to develop report formats on their own. We have consequently received reports that varied widely in terms of depth and the parameters used. This has made it difficult if not impossible to build on the strengths of each individual report by combining and comparing results in ways that could provide valuable scientific results and lessons we can all learn from. The Northwest Power and Conservation Council's 2011 Categorical Review of RM&E underscored this shortcoming and we set out to change it.

The new approach will provide you with a ready-made online report design that will link to information you have already provided, eliminating duplication of effort. Depending on the report you're compiling, you may be able to simply cut and paste text into the document. The template will explain what information is needed where and will even create a table of contents for you.

Producing your annual reports will still take time, but, we hope, less of it, and will result in reports that more clearly communicate the results of your hard work in a way that we all find easier to understand and benefit from. We are asking for a second, simpler report for sponsors with projects that support Reasonable and Prudent Alternatives in the Biological Opinion for the Federal Columbia River Power System, which will help us track and report our progress toward BiOp goals. This is especially important because the BiOp calls for Comprehensive Evaluations of this progress in both 2013 and 2016. Due to regulatory reporting requirements BPA is asking all sponsors to have draft reports submitted in January and final reports completed in March to align with BiOp reporting timelines. This change will be required in new contracts, however in existing FY 12 contracts we are asking for sponsors to accommodate the time change without pursuing contract amendments in the pilot year of the tool.

We want your feedback on this approach because it needs to work for you. This year will be a pilot phase for the new reporting program and we will offer web-based training over the next few months to help guide you and answer any questions. The templates will be available on <u>www.cbfish.org</u>, with step-by-step instructions and frequently asked questions. Comments may be submitted through the "Request Support" link by July 2013. For more information please review the attached material, contact your COTR or submit comments to <u>rmesupport@bpa.gov</u>

II. How to Create the Technical Report

A. How to access the tool in Taurus

To help project sponsors produce the Technical Report, BPA has developed a web-based tool that will create and download a Word document, with an outline, headers and fonts, specific to your project. The <u>Technical Report Template Wizard</u> will guide you through a step-by-step process to create the document, which you can then download and complete in Word. The Wizard can also download content from your statement of work and project proposals from Pisces and Taurus so that you can cut-and-paste appropriate sections of the report, such as implementation strategies or methods into the template. The Wizard can also be used to create a template for other types of annual reports, such as reports on implementation strategies. Sponsors may choose to download a *Standard Template* with one Introduction, Methods, Results and Conclusion section for the entire report, or alternatively the sponsors may choose to download a *Chapters Template* with a higher level Executive Summary and introduction for the full report and an Introduction, Methods, Results and Conclusion section for tests are strategies or basins should consider using the *Chapters Template*.

To access your Technical Report Template Wizard and supporting material:

- Go to http://www.cbfish.org
 Select the Login link in the upper right corner.
 Enter your project number or name (in the upper right corner search box)
 Find Project project # or title
 Select "Reports & Documents Tab on left
 Project Summary
 Associated Portfolios
 Reports & Documents
 Map
- Select "RM&E Technical Report" tab

Project Views:	Project 2003-007-00: Lower Columbia River Estuary Ecosystem			
Summary				
Reports & Documents	Reports Data Documents BiOp Annual Report RM & E Technical Report			
Contracts	These PDF reports are generated dynamically, always showing you the most up to date informat download the underlying data sets to structured text or Excel format. These reports are also ava			

- Enter Basic Report Information: For Report Title Page in the *Enter Basic Report Information Section*
- Specify the:
 - 1. Report Title
 - 2. Subtitle
 - 3. Date range of report: Select the applicable years for the report
 - 4. Contracts (Note: If you select (check) multiple contracts under one annual report for the project, the expectation would be that one integrated report will be submitted. If a separate annual report is being submitted for each contract the project sponsor, lead, or manager should consolidate the reports into chapters and provide an executive summary for the entire document.)
 - 5. Authors
 - 6. Organization/s
 - 7. City Stat and Zip

	Reports Data Documents	BiOp Annual Report RM & E Technical Report				
	Report Information Reports					
	1. Enter Basic Report Information:					
1	The information entered below will b	be used to complete the title page of the report template.				
1	Report Title:					
2	Subtitle (optional):	<u>~</u>				
		×				
3	Date range report covers:	2012 -				
	Report covers work performed under BPA contract #:	49138 (2003-007-00 EXP LWR COL RIVER/EST ECO MONITOR)				
4		49230 (2003-007-00 EXP USGS LWR COL RIVER/EST ECOSYSTEM MONITORING) 54891 (2003-007-00 EXP USGS LWR COL RIVER/EST ECO MONITOR)				
		54907 (2003-007-00 EXP LCREP LWR COL RIVER/EST ECO MONITOR)				
5	Author(s):	<u>^</u>				
		M				
6	Organization(s):	Lower Columbia Estuary Partnership				
7	City, State, Zip:					
Ĺ		[check all] [uncheck all]				

- Next, select Program Strategies and applicable Fish and Wildlife Program Sub-Strategies from the <u>RM&E Strategies</u>/questions; and <u>Implementation Strategies</u> provided for reporting.
 - Based on contract WEs, <u>Pisces Metrics</u> and environmental metrics from protocols, an automated analysis of the WEs in your contract(s), the Wizard will automatically select the applicable <u>Program Strategies</u>. Please review and check or un-check any Strategies or associated questions you believe are not appropriate.

Selec	t Program St	rategies: [check all] [uncheck all]
Based (Strategi	on an automated a es or associated	analysis of the work elements in your contract(s), we have inferred that you are contributing to the Program Strategies listed below. Please review and un-check any questions you believe are not appropriate.
1. Fish	Population Statu	s Monitoring (RM&E)
	Sub-Strategy 1.	Assess the status and trend of natural and hatchery origin abundance of fish populations for various life stages. What are the status and trend of abundance of natural and hatchery origin fish populations?
	Sub-Strategy 2.	Assess the status and trend of productivity of natural origin fish populations. What are the status and trend of productivity of fish populations?
	Sub-Strategy 3.	Assess the status and trend of spatial and temporal distribution of fish populations. What are the status and trend of spatial and temporal distribution of fish populations?
	Sub-Strategy 4.	Assess the status and trend of diversity of natural and hatchery origen fish populations. What are the status and trend of diversity of natural and hatchery origin fish populations?
2. Hydi	rosystem RM&E	
	Sub-Strategy 1.	Monitor and evaluate fish performance within the hydro electric corridor relative to biological objectives. Are anadromous and resident fish species meeting juvenile and adult hydrosystem passage performance objectives?
	Sub-Strategy 2.	Monitor and evaluate migration characteristics and river conditions relative to environmental and physical performance objectives. What are the most effective configurations and operations for achieving desired performance objectives in the FCRPS?
	Sub-Strategy 3.	Monitor and evaluate the effects of changes in hydro system configurations and operations. What is the post-Bonneville mortality effect of changes in fish arrival timing and transportation to below Bonneville?
	Sub-Strategy 4.	Assess and investigate as appropriate critical uncertainties related to the scientific relationships that determine the survival and condition of fish passing thru or transported around the hydro system. Under what conditions does in-river passage provide greater smolt-to-adult return (SAR) rates than transport?

Figure 1. Example screenshot of the program strategy and management question selection wizard.

• Last: At the top of the page select on the *Reports* Tab and then select the documents (*Technical Report Template* and *Pisces Contract SOW and Taurus Proposal Content* by contract or project.) Under the Technical Report Template section sponsors may choose to download the *Standard Template* with one Introduction, Methods, Results and Conclusion section for the entire report, or alternatively the sponsors may choose to download the *Chapters Template* with an Introduction, Methods, Results and Conclusion section for each deliverable.

Reports Data Documents RM & E Technical Report BiO Report Information Reports Pisces Contract SOW and Taurus Proposal	p Annual Report Technical Report - Templates
Content To facilitate the development of annual Technical Reports, the Content Supplement gathers together work descriptions and summaries that Sponsors have already written in project proposals and contract Statements of Work. Work Element descriptions, proposal objectives and deliverables, links to maps, and other content is included. Sponsors are encouraged to cut and paste from the Content Supplement into the Technical Report - Template wherever appropriate. Links <u>\$1064 Technical Report - Content Supplement</u> <u>\$4272 Technical Report - Content Supplement</u>	The Technical Report - Lemplate has been developed in a Microsoft Word format that includes a Table of Contents, section headers, and font styles. Use of the Template is not limited to RM&E Work Elements (WEs) and sponsors can use the template to report annually on implementation Strategies for habitat restoration, harvest, and other elements of accomplished work. Formatted sections are provided for input to the "Introduction" and "Results and Conclusions" sections. Links <u>Technical Report - Standard Template</u> <u>Technical Report - Chapters Template</u>

B. **Title Page (**add background formats, images and logos as desired)

Title Subtitle (If Applicable)

Project Number

Report covers work performed under BPA contract #Contract Number Report was completed under BPA contract #Contract Number

Month Year - Month Year

Author(s), Agency(s), City, State, Zip

Month Year

This report was funded by the Bonneville Power Administration (BPA), U.S. Department of Energy, as part of BPA's program to protect, mitigate, and enhance fish and wildlife affected by the development and operation of hydroelectric facilities on the Columbia River and its tributaries. The views in this report are the author's and do not necessarily represent the views of BPA.

This report should be cited as follows:

Primary Author, Other Authors, Report Title, Mnth/Yr - Mnth/Yr Annual Report, Project Number, # Electronic Pages

C. Table of Contents

The content in the table of contents will be auto-generated based on the items you selected in the "Technical Report Template Wizard". After completion of the report, you will need to update the page numbers in the auto-generated Table of Contents by right clicking in the highlighted Table of Contents and selecting "**!Update Field**" (See Figure 2).

Table of Conte	nts	
I. Executive Proj II. Introduction III. Methods: Prot IV. Results	ect Summary/Abstract Times New ▼ 12 ▼ A Ă Ă A ♥ ダ B I 書 塾 ★ A * 读 读 : :	4 5 Area
V. Synthesis of F VI. References VII. Appendix A:	ndings: Discussion/Conclusions. & Cut @ Copy	
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For each figure inse selecting "Insert Co automatically will u	A Eont Image: Image of the state o	end right clicking in the image and "Figure" caption; this will support n your documents as you add new figures.
Table of Tables		0

Figure 2. Screen capture of the "Update Field" feature for the Table of Content, Figures, Table of Tables or any inserted cross-reference

Example Table of Contents: (without subsections)

I.	Executive Project Summary/Abstract	9
II.	Introduction	9
III.	Methods: Protocols, Study Designs and Study Area	10
IV.	Results	10
V.	Synthesis of Findings: Discussion/Conclusions	13
VI.	References	15
VII.	Appendix A: Use of Data & Products	15

• If you use figures or tables, we recommend you create a Table of Contents for these as well. You can do this by right clicking in each figure or table in your document, selecting Insert Caption and selecting the type of caption (Table or Figure). (See Figures 3 and 4.) This will support automatically updating the numbers of the figures or tables in your document as you add new ones.

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	E <u>d</u> it Picture
8	<u>H</u> yperlink
2	Insert <u>C</u> aption
	Borders and Shading
3	Format Picture

Figure 3. Right click on image to see Insert Caption.

Caption			? 🗙
Caption:			
Figure 2			
Options			
Label:	Figure		*
Position:	Equation Figure		^
	Table		
New Labe			~
AutoCaptic	on	ОК	Cancel

Figure 4. Select Table or Figure.

After completing the report, you will need to update the page numbers in the auto-generated Table of Contents, Table of Figures and Table of Tables by right clicking in the highlighted Table and selecting Update Field. If your report doesn't include figures, delete the Table of Figures.

Table of Conte	ents	
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For each figure inse selecting "Insert Co automatically will u	Image: A paragraph Image: Bullets Image: Bullets Image: Bullets	nd right clicking in the image and "Figure" caption; this will support n your documents as you add new figures.
Table of Tables		

D. Executive Summary

If your report is 10 or more pages long and/or includes data analysis, please provide an Executive Summary. Target 200 to500 words for every 30 pages of the report..

The Executive Summary should be a complete but concise summary written for Council members, BPA Fish and Wildlife Program managers and your organization's executives. You should complete this section last. Write in the past tense and include the following elements:

- Context. Describe the issues you investigated and the appropriate Fish and Wildlife Program Strategies (including Council Sub-basin Plan strategies), with particular emphasis on the RM&E Strategies the project addressed. Organize the summary by RM&E type (i.e., Status and Trend Monitoring, Action Effectiveness Monitoring, Project Implementation/ Compliance Monitoring or Uncertainties Research).
- Approach. Describe your methods at a high level. Do not include detailed information that is already captured in your proposal and in monitoringmethods.org (e.g., field data collection, remote sensing, lab analysis, and modeling).
- Results. Provide a synthesis of your data and lessons learned in context of the Fish and Wildlife Program's strategies. For example, rather than providing the data that informs the status of science. i.e. Viable Salmonid Population (VSP) attributes, provide the results that relate to and support interpretation of how the work may be used to adaptively manage the Fish and Wildlife Program's implementation strategies in the conclusion section of the document.
- Include information that would inform potential next steps of future work.

E. Introduction

Target 500 to1000 words per deliverable or objective.

The Report Wizard will generate sub-categories for your introduction to each of the RM&E strategies checked when the template is generated. This is used to document the content and purpose for the study.

• Discuss purpose of your work in relationship to each RM&E and Implementation Strategy and associated questions provided and summarized in the Taurus proposal objectives. Discuss both the geographic and biological context, (e.g. basins and species).

Note: The information provided in the template will be organized based on the Pisces SOW and metrics associated with WEs 157, Collect/Generate/Validate Field and Lab Data, and 162, Analyze/Interpret Data. You may rearrange the order of deliverables and Fish and Wildlife Program Strategies.

• For uncertainties and action effectiveness research projects, state the hypothesis being tested and provide a time line for study implementation and completion of key deliverables.

- Discuss relationships to other projects or contract(s) that are related to this work. (Note: Use the content from the Pisces SOW and Taurus Proposal Supplement which can be downloaded through the Report Wizard.) For example, if data being collected under your project is being contributed to another project for analysis, describe that relationship.
- Insert maps, aerial photos or pictures that depict the project/study location or project context.

Note: Project site maps should be used to illustrate the location of study treatments, sampling sites, population boundaries, or the area of inference. (A customized map from Taurus of project's WEs at the Contract level e.g. <u>http://www.cbfish.org/Map.mvc/Index/Contract/6142</u> or Pisces WE maps may be an easy source, or other resources like Google Maps or Google Earth may be used.)

F. Methods: Protocols, Study Designs, and Study Area (Title as desired)

(Target 200 words)

• Summarize protocols and discuss the relationship to deliverables based on protocol objectives. (BPA will insert a link to the protocol(s) from monitoringmethods.org.)

Note: If a protocol has been modified since it was submitted or published, discuss significant changes in the Discussion/Conclusions section of the report. This is important, particularly as these changes might apply to others' work. Update the "implementation notes" for minor annual variations in method implementation (e.g. missing a sample week or a sample site due to high flows); or update new protocols if methods or designs are modified. Make all changes in <u>www.monitoringmethods.org</u>

• Provide a list or table of metrics and indicators assessed for each protocol, or include it as an appendix and reference it here.

G. Results

Target 1 to 2 pages per each deliverable.

The Report Wizard will generate sub-categories for each of the RM&E Strategies checked when you create the template. You may modify the order of strategies and deliverables as necessary. Any changes should be carried through the document for consistency. Organize the information by species and ESU when applicable and state the type of monitoring being conducted (Status and Trend Monitoring, Action Effectiveness Monitoring, Project Implementation/ Compliance Monitoring or Uncertainties Research).

1. For each program strategy question, deliverable and related proposal objective, provide project/contract data, results and data derivations. (Do not discuss the significance of results in this section. Include that discussion in the Synthesis and Conclusion section. Data and statistical analyses should be organized by topic and species and should include sample/effect sizes, statistical significance, etc.

- 2. In most cases, the results should include past and current data as well as summary results that update prior years' data. Results should be displayed in time series and reference older data when appropriate.
- 3. For trend analysis, summarize text and results in figures and tables if numerical precision is important.
- 4. Results should be presented in biologically or statistically meaningful terms. For example, if you are monitoring adult abundance for a subset of a population, specify the population and the proportion the subset represents. Sub-population names, cohort name, stock names are not sufficient to describe a population or ESU/DPS. In cases where your study is comparing reference and treatment sites, it may be more appropriate to present results from separate analyses or to present values as percentages, as in Figure 7, rather than providing graphs to illustrate differences between absolute values as shown in Figure 6.







Figure 7. Values as a percentage relative to one another may be easier to interpret.

If results are extensive and include multiple figures and graphs, consider including raw data or derivations in an appendix for the specific WE or RM&E strategy. For example if a project is

quantifying 15 limiting factors and includes separate images or graphs for each metric/indicator, consider including them in an appendix and providing a cross-reference in the document section Figure.

Home Insert	Page Layout References	Mailings Review View	v Add-Ins
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For y Proto Table Exe Intr Met Syn	Insert as hyperlink insert as hyperlink insert as hyperlink insert as hyperlink which heading: cedural Guidance to Create Technical to access your "Technical Report Te le of Contents Guidance: cutive Project Summary /Abstract roduction hods: Protocols, Study Designs, and ults thesis of Findings: Discussion/Conclu	Insert reference to: Heading text Include above/below Report mplate Wizard" and supporting mater Study Area sions	6 below" or "Turn to page 8." Cross references are automatically updated if the content is moved to another location. By default, cross references are inserted as hyperlinks.
	erences pendix A: Use of Data & Products		
		Insert Cance	

Figure 8. How to add a Cross Reference link to a section

Example: Results for RM&E Strategies for Project 1998-016-00: Escapement and Productivity of Chinook and Steelhead:

- (1) Fish Population Monitoring Status and Trends
 - (a) John Day River Major Population Group (MPG) Steelhead Redds & Escapement

Basin-wide sampling for the MPG resulted in observation of 53 steelhead redds within 96 km of stream, approximately 2.2% of an estimated 4,322 km of steelhead spawning and rearing habitat within the John Day River Basin (Table 1). This resulted in a redd density of 0.55 redds/km. By expansion, an estimated 2,386 observable redds were constructed within the John Day River Basin by an estimated 11,334 spawners (Table 1; Figure 7).

Table 1. Distance surveyed, number of unique redds observed, redd density (redds/km), estimated total number of redds, fish per redd estimate from Deer Creek (Grande Ronde River basin), and spawning escapement estimate with 95% C.I. for the John Day River basin from 2004 to 2011.

rear kin R	edds Densi	y Total Redds	Fish/Redd	Escapement	95% Lower	95% Upper
2004 94.7	66 0.70	3,071	1.46	4,484	1,657	7,310

2005	101.2	39	0.39	1,681	2.20	3,698	1,261	6,137
2006	90.5	67	0.74	3,202	1.66	5,315	2,189	8,441
2007	99.6	181	1.82	7,758	1.12	8,689	5,939	11,439
2008	105.0	56	0.53	2,277	4.07	9,260	4,742	13,775
2009	98.6	44	0.45	1,934	3.81	7,368	3,642	11,099
2010	96.9	155	1.60	6,914	1.59	11,027	4,628	17,434
2011	96.0	53	0.55	2,386	4.75	11,334	6,565	16,103



Figure 7. Annual adult steelhead spawner escapement estimates for the John Day River basin from 2004 to 2011. Error bars indicate 95% confidence intervals.

H. Synthesis of Findings: Discussion/Conclusions

Target 1 to 2 paragraphs per strategy and associated deliverable.

Note: You may merge Sections 6 and 7 to improve the continuity of a large document. If you do this, please clearly identify and delineate the results and the conclusions from the project.

This section is intended to address lessons learned and/or to synthesize conclusions. This will inform Program implementation and adaptive management of the Fish and Wildlife Program during the Council amendment process. As in the Results Section, organize the findings by species and ESU and when applicable, state the type of monitoring. For each strategy and deliverable, address requirements 1through 3 below.

1. Lessons Learned: Address each applicable sub-strategy and management question(s) for higher-level or project/program level adaptive management. If studies are incomplete, discuss preliminary findings. (This is required for WE 162, optional for WE 157 and other Implementation Strategies.)

Example:

a. In relation to the Tributary Habitat RM&E Strategy question *"What is the status of limiting factors?"* results showed the food availability and low flow limiting factors

remained the same, while a reduction in temperature showed improvements for the limiting factor water quality to a point that it may be classified as properly functioning. *Therefore, the Program should consider continuing restoration projects address flow and food supply for the area studied.*

Or,

- b. With the advent of new PIT and SNPs tagging technology and methods, we found improved tagging survival (decreased mortality, decrease in tag shedding and increased tag detection) and, in combination with genetics SNPs analysis, population estimates that elp enumerate adult returns more precisely. *Therefore, the Program should consider shifting to a combination of PIT and genetic tagging to monitor adults and seek lower ESA "take" mortality quotas in tagging permits.*
- 2. When applicable, specify lessons learned for effective use of various implementation methods for each relevant RM&E WE.

Sponsors may provide general implementation findings and conclusions for improving contract implementation and field work. Identify any problems using the specified protocol and recommended solutions.

Examples:

- a. It was determined that the indicator of "benthic macroinvertebrate species composition" does not correlate to fish growth or habitat capacity to improve survival. However benthic macroinvertebrate weight or drift biomass do correlate. Therefore, we are changing our protocol to collect and analyze benthic macroinvertebrate weight and drift biomass relative to estimates of fish growth and survival.
- b. It was determined that the indicator's inter-annual variation is small and therefore it could be monitored every five years.
- c. Bias in collection of pebble count data makes this an unreliable method. We are examining alternative methods to pebble counts.
- 3. Discuss limitations or qualifications regarding the use of data and provide contact information for any follow up discussion on data limitations, use or analysis.

Examples:

- a. Extrapolation of indexed sub-populations to the full population may not be advisable without stated qualifications regarding the analysis.
- b. Biological or ecological impairment effects may be species or population specific and may need to be distinguished.
- c. Reference sites may not fully represent conditions typical of the population or species in their range.

H. References

Update the references provided in the original proposal as necessary. Alphabetize references and include them in the following format:

(Author/s last name or Organization(s), Title, Publication Date, Publisher, Volume/Edition, Page #)

I. Appendix A: Use of Data & Products

- 1. Identify the database, web-links or documented sources for related data sets for the project. Information from Pisces Data Repository will be provided in the Sponsors Pisces SOW and Taurus Proposal Content. However, if the database is not web-accessible and not listed on monitoring methods.org, include a contact for the individual who manages or supports data access.
- Identify citations for other technical reports produced/published using data collected or evaluated by this project in the calendar year that could be included in potential review. Information from Pisces will be provided in the Sponsors Pisces SOW and Taurus Proposal Content uploaded to the project or contract.

J. Appendix B: Detailed Results (Optional)

Provide detailed results for specific deliverables in separate Appendices.

K. Appendix C: List of Metrics and Indicators (Optional)

If not already included in the Methods section, include a list of metrics and indicators by protocol.

III. How to create the Non-Technical Project Report

Non-technical projects that support Strategies and include one or more RM&E WEs may only require reporting on program strategies. If the sponsor includes a report on Implementation Strategies in their Technical Report, the following structure should be applied.

Introduction. Provide context. (State the relationship of the project to program questions and contracted work.)

Results. Provide figures. (Include photos or plans.)

Discussion/Conclusions. Include findings of best management practices and lessons learned.

IV. How to Create the BiOp RPA Report

If your project has a BiOp RPA association declared as part of the project proposal or project summary, or if you believe your project supports a BiOp RPA, you will need to complete a BiOp RPA Report at the project level.

If your project supports an FCRPS BiOp RPA, you will key in your report directly in Taurus. If your project supports another BiOp RPA (e.g., the Willamette BiOp or the Libby BiOp), you will create a Word document to be appended to your RM&E Technical Report, as described in part B, below.

Alternatively if you are reporting on other BiOps RM&E RPAs use section IV. B. of this document and the language of a BiOp RPA to create a document that can be appended to the RM&E Technical Report in section II. The FCRPS BiOp RPA requirements (questions, metrics, and locations) and BPA technical leads are documented at http://www.cbfish.org/FcrpsBiOp.mvc/Index.

A. How to Access the FCRPS BiOp Annual Report

- Go to www.cbfish.org
 Select the Login link in the upper right corner.
 Enter your project number or name (in the upper right corner search box).
 Find Project or title
 Select Reports & Documents Tab on left.
 Project Summary
 Associated Portfolios
 Reports & Documents
- Select BiOp Annual Report tab.

Project Views:	Project 2003-007-00: Lower Columbia River Estuary Ecosystem					
Summary						
Reports & Documents	Reports Data Documents BiOp Annual Report RM & E Technical Report					
Contracts	These PDF reports are generated dynamically, always showing you the most up to date informa download the underlying data sets to structured text or Excel format. These reports are also ava					

Map

• Select the calendar year for the start and end date of the report. (Figure 5)

VIEWING 2	26 OF 26 ASSOCIATED RPAS			CALENDAR YEAR	2012 🚽 😼 😨 🖕
RPA	Title	Declared	Inferred	Status	Request Review
Figure 5	Selecting Calendar year for RPA Report				

- Select Calendar Year for the report you are editing.
- For each RPA with a *Declared Association* identified, select *Input Needed* to go to the report. (Figure 6).

RPA	Title	Declared	Inferred	Status	Request Review
•		•			
RPA 50.4	Fund pilot studies in Wenatchee/Methow/Entiat	Yes	No	Input Needed	
RPA 50.6	Review/modify existing fish pop status monitoring projects	Yes	No	Input Needed	
RPA 50.8	Report available information on population viability metrics	No	Yes	n/a	
RPA 56.1	Implement research in select areas of the pilot study basins	Yes	Yes	Input Needed	

Figure 6. Screenshot of RPA Input Needed and Declared association highlighted.

Note: There is also an option on this menu for Request Review (shown below). Select this option to contact the RPA owner if (a) you believe your project supports an FCRPS RPA that is not listed, or (b) you disagree with the RPA association specified for your project. Clicking on this option will open an e-mail box for you to enter in your review request. BPA will respond via email. If approved, the change will appear on the RPA Report web page later.

RPA	Title	Declared	Inferred	Status	Request Review
		•	•		
<u>RPA 50.4</u>	Fund pilot studies in Wenatchee/Methow/Entiat	Yes	No	Input Needed	

Figure 7. Screenshot of how to generate email request for RPA review by BPA

• Once you have selected *Input Needed*, you will be taken to the BiOp RPA report screen. Follow specific instructions for each BiOp RPA sub-action associated with your project to show 1) how you have implemented the action(s) 2) relevant results and 3) adaptive management or recommend actions relative to BiOp guidance or Implementation Plans (Figure 8.)

2012 BiOp An	nual Report - RPA 58.1 Evaluate smolt fitness in reaches from BON through estuary			
Project Views:	2012 BiOn Annual Report - RPA 58.1 Evaluate smolt fitness in reaches from BON through estuary			
Summary				
Reports & Documents	Click here to review the RM&E Recommendations for this RPA			
Contracts	Instructions:			
Work Elements (SOW)	Recommendations report guidance provided in the hyper-link Please follow each section's word count guidance; the combined word count for all three sections should not exceed 2000 words (2 pages) of fext			
Implementation Metrics				
Environmental Metrics	Questions: 1. What are the juvenile survival rates by tagged species/life history type from Bonneville Dam to the plume for various river segments and study-years?			
Work Sites	What are the common memory in the survivaruate for tagged juverine samonids in the lower coulinoid river and estuary r			
Мар	SECTION 1: IMPLEMENTATION			
Notes	Identify how your project contributed to meeting RPA objectives/questions. Describe how the project contributes to meeting each RPA objective: when appropriate, describe the biological relevance, i.e. ESU or populations and			
Budget Timeline	relevant life stages. (e.g. adult Snake River fall Chinook), the geographic extent (e.g., Snake River mainstem above lower Granite Dam), and time frame of information associated with the RPA (e.g., August 1-November 1, 2011). Responses typically contain fewer than 500 words.			
Budget Transfers	🖄 X 陆 遼 이 (* B I 및 ∞ 要 至 Fortfamily • Fortsize • A • 型 •			
Project Exp. by FY	田·田·康建 11 田田 12 礼子 福田 北 ×1Ω Μ			
Project Exp. by Month	These questions are provided for your convenience. Please delete any irrelevant questions.			
Contract Spending Plan	 What are the juve nile survival rates by tagged species/life history type from Bonneville Dam to the plume for various river segments and study-years? What are the common themes in the survival data for tagged invente salmonids in the lower Columbia River and estuary? 			
Change Requests	2. In meters and common moments and a solid a radia not agge a jorenia, aminimos an are rever e controla raver and estably:			
Proposals				
Assessments (ISRP_NPCC)	Path: p			
,				
Associated Portfolios	SECTION 2: RESULTS			
	Include results of data collection, analysis, data management and regional coordination for the RPA questions addressed. Provide results in tabular and/or graphical format. When appropriate, provide web-links to applications that display results online. Note, for any summarized			
Project Actions:	results presented graphically, the source file (Excel, Access or other statistical file) should be available on request for formatting purposes. Responses trainable routing the first of the source file (Excel, Access or other statistical file) should be available on request for formatting purposes.			
Add Photos				
Define Area				
Categorize	[[[]]][[]]][[]]][[]]][[]]][[]]][[]]][
Manage Relationships	These questions are provided for your convenience. Please delete any irrelevant questions. 1 What are the jute relevant relationship to a second specific delete any irrelevant questions.			
Associate to BiOp	 What are the common themes in the survival data for tagged juvenile salmonids in the lower Columbia River and estuary? 			

Figure 8. Screenshot of online RPA report input form.

Reference the content from the FCRPS BiOp RM&E RPA Workgroup Implementation Assessment and Recommendations where applicable. You can access the full report from the RM&E RPA workgroup by selecting the link at the top of the page:

Click here to review the RM&E Recommendations for this RPA Subaction

B. Reporting on RPAs from other BiOps

Report formats for RPAs in other ESA BiOps (e.g., Willamette and Libby) are not autogenerated by Taurus. Instead, please use a basic reporting format as outlined below. Simply set up the title and the three sections outlined below in your own Word document and provide the required information in each section. You can use or reference content already developed for the Technical Report for your responses.

Annual BiOp RPA Report: (Include Project Number and Year) Author(s)/ Organization: Date:

Section 1: Implementation

Target 500 words or less.

Describe how the project contributes to meeting each RPA objective. As appropriate, describe the biological relevance (i.e. ESU or populations and relevant life stages, e.g., adult Snake River fall Chinook), the geographic extent (e.g., Snake River mainstem above lower Granite Dam) and reporting timeframe (e.g., August 1-November 1, 2011).

Section 2: Results

Target 1,000 words or less.

Provide results of data collection, analysis, data management and regional coordination for the RPA questions addressed. Provide results in tabular and/or graphical format. Include narrative as necessary to provide context. This should be copied and pasted from the RM&E Annual Technical report and may be referenced for further information. When appropriate, provide web-links to applications that display results online. For any summarized results presented graphically, please provide the source file (Excel, Access or other statistical file) for formatting purposes.

Section 3: Adaptive Management

Target 500 words or less.

When applicable, describe project level adaptive management activities that were implemented and/or recommended to guide implementation of the RPA action and the relationship to BiOp implementation. Actions that support BiOp implementation can be referenced in: http://www.salmonrecovery.gov/Files/2010-2013%20FCRPS%20BiOp%20Implementation%20Plan%206%2010.pdf

For example, report on delays in implementation and how steps are taken to adaptively manage future actions if changes are needed.

V. Glossary

BiOp RPA Report: A report to support documentation of compliance with the Endangered Species Act (ESA) Biological Opinion (BiOp) Reasonable and Prudent Alternatives (RPAs) required to mitigate for "Take" of listed species.

Environmental Metrics: Monitored measurements and derived variables used for analysis. These are referred to as <u>Metrics</u> and <u>Indicators.</u>

Implementation Strategy: Actionable approaches to support operations and maintenance of hydropower and supplementation facilities, species management or habitat restoration and acquisition. Web versions of the strategies are documented at http://www.cbfish.org/ProgramStrategy.mvc/ProgramStrategiesIndex

Pisces Metrics: A value statement of quantity or quality of work accomplished by completing a task. Also identified as WEss. An index of metrics is located at http://www.cbfish.org/Metric.mvc/Index

RM&E Strategy: Actionable approaches to addressing management questions that inform Program implementation. Implementation, compliance, status and trends and action effectiveness monitoring inform the RM&E strategies or shed light on uncertainties. Web versions of the Strategies are documented at http://www.cbfish.org/ProgramStrategy.mvc/ProgramStrategiesIndex

Sponsor's Pisces SOW and Taurus Proposal Content: A document generated by the Report Wizard containing content from project sponsors' proposals and contract statement of work. Sponsors can cut-and-paste the content of this document or otherwise refer to it in developing their annual Technical Report.

Strategy: Actionable approaches to achieving objectives of the <u>Columbia River Basin Fish &</u> <u>Wildlife Program</u>. An index of Program Strategies is located at <u>http://www.nwcouncil.org/fw/</u> and web versions of the strategies are documented at http://www.cbfish.org/ProgramStrategy.mvc/ProgramStrategiesIndex

Technical Report: An annual report on research and monitoring written in a standard scientific format.

Technical Report Template Wizard: A web-based tool in Taurus used to create a Technical Report Template.

Technical Report Template: A Word document generated by the Report Wizard, structured based on the scientific process, which project sponsors use to format their Technical Report.

Work Elements (WE): A standardized task or activity, e.g., Install Fence, Collect Data, Purchase Land and Submit Progress Report. An index of work elements is located at <u>http://www.cbfish.org/WorkElement.mvc/Index</u>