Asset Management Program Overview

IPR Follow-up BPA SAMPs

Oct. 13, 2020 1-3pm

WebEx Only:

https://bpa.webex.com/bpa/j.php?MTID=mcb8a55260c9e978e1465553c2abea49d

Meeting number (access code): 199 887 0203

Meeting password: 5BUxPFDHe32

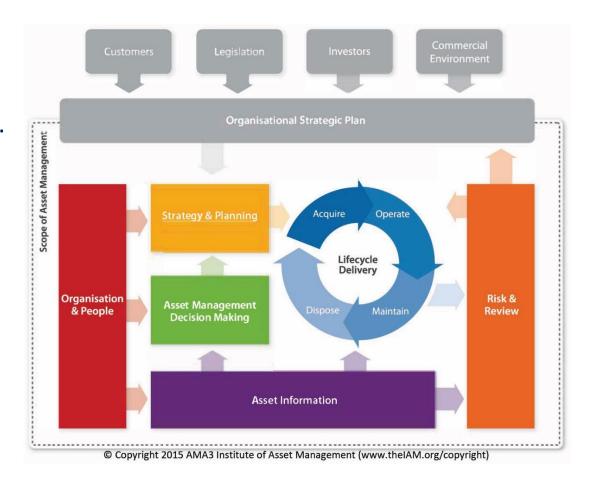
Agenda

- ✓ Meeting Context and Introduction
- ✓ BPA's Asset Management Program
- √ Strategic Asset Management Plans (SAMPs)
- ✓ Asset Plan Overview
- ✓ Strategic Planning versus Project Approval
- ✓ Questions and Discussion

Introduction

Asset Management:

- BPA's agency Asset Management Program was established in 2016.
- BPA is moving from managing assets to asset management.
- BPA uses an Asset Management Program based on the Institute of Asset Management (IAM) conceptual model that aligns with the International Organization of Standardization (ISO) 55000 Series and Publically Available Specification (PAS) 55 standards.



BPA Strategic Plan - SAMP – Asset Plan Alignment



ASSET PLAN: The asset plan is documented information that specifies the activities and resources and timescales required for individual assets, or groupings of assets, to achieve the organization's asset management objectives.

Strategic Asset Management Plans



BPA's SAMPs:

- Describe the current condition, performance and risk of assets funded by BPA.
- Outline long-term goals, objectives and current initiatives.
- The focus is strategic: looks out five or more years, with at least a 10 year capital projection.
- Are refreshed every two years and are the input into IPR numbers.
- Uses a standard format and the Asset Management Council (AMC) applies lessons learned to continuously improve SAMPs

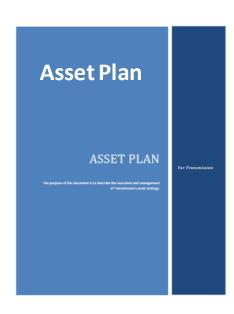
ISO 55,000

3.3.2

strategic asset management plan SAMP

documented information (3.1.6) that specifies how organizational objectives (3.1.14) are to be converted into asset management (3.3.1) objectives (3.1.12), the approach for developing asset management plans (3.3.3), and the role of the asset management system (3.4.3) in supporting achievement of the asset management objectives

Asset Plans



BPA's Asset Plans:

- Focus is on the tactical implementation of the SAMP for the next 1-2 years, which is developed after IPR and Final Proposal.
- Refreshed every year and is the input into Start of Year (SOY) budgets.
- Internal document with specific project information.
- A standard format is used and lessons learned are applied by the Asset Management Council (AMC).

ISO 55,000 3.3.3 asset management plan

documented information (3.1.6) that specifies the activities, resources and timescales required for an individual asset (3.2.1), or a grouping of assets, to achieve the organization's (3.1.13) asset management (3.3.1) objectives (3.1.12)

BPA Evolving from Managing Assets to Asset Management and Continuous Improvement

- ✓ SAMP V1 February 2018
 - ✓ Conducted an independent review of all SAMPs (Woodhouse)
- √ SAMP V2 March 2020
 - Added Fleet to the process the 6th Asset Category
 - Eliminated Fleet's annual business case
 - Updated format and guidance based on lessons learned
 - Direct alignment with Finance for IPR Capital forecast
 - Continued improvement around SAMP risk assessment
- ✓ Asset Plans 2018
- ✓ Asset Plans 2019
 - Updated format and guidance based on lessons learned
 - Made Asset Plans more concise
- ✓ Asset Plans 2020
 - Direct alignment with Finance for SOY Budget
 - Improved alignment with SAMPs



BPA's Asset Management Categories vs. IPR Categories

2020 SAMPs and Asset Categories*	2020 IPR Direct Categories
Fed Hydro	Fed Hydro
Transmission	Transmission
Facilities	Facilities
IT	IT
Fleet	Fleet
Environment Fish & Wildlife (EF&W)	Fish & Wildlife
* direct dollars	Environment
	Security
	Columbia Generation Station

- Not Every IPR category has a SAMP related to it.
- SAMPs are the source for related IPR categories capital and expense forecasts.
- IPR expense numbers include Asset Management investments among other expenses.
- Currently EF&W asset category does not include Environment. Environment is discussed in the Transmission SAMP.

Fed Hydro SAMP

Key Information:

- Describes a strategy focused on making coordinated operations, maintenance and investment decisions that maximize the value of FCRPS assets by reducing costs, mitigating risk, improving efficiency and/or producing incremental value.
- Outlines our analytical processes for determining the optimal time to replace assets and identify investments based on asset condition, likelihood of failure and outage consequence.
- Illustrates the risk profiles associated with various levels of investment as well as the impacts on condition, risk matrices and the cost of generation for the recommended investment level.

Maturity:

• Second year completing a SAMP but based on asset management fundamentals in place since 2008.

Redactions:

None

Transmission SAMP

Key Information:

- Transmission strategy builds off the Total Economic Cost (TEC) models with continued focus on understanding an asset's Criticality, Health & Risk (CHR). Prioritizing initiatives that focus on analytics for decision making including: Prioritizing capital by highest regional risk, and integrating maintenance and best value alternatives for investments and mitigation levels.
- Strategy includes: The execution delivery model through secondary capacity, and visibility of demand and capacity across Transmission Services.
- Risk tolerance ceiling, using CHR data, has been set and is actively informing the strategic plan as well as the asset plan with specific projects targeted at maintaining system reliability and safety.

Maturity:

This is Transmission's 2nd iteration of the SAMP

Redactions:

None

EF&W SAMP

Key Information:

- Addresses Fish and Wildlife Program assets.
- Three EF&W SAMPs sub-categories:
 - Lands Continue program implementation strategy with improvements around critical processes.
 - **Hatchery** Fund the implementation of hatchery programs to ensure mitigation objectives are being met through coordination with sponsors and condition assessments of hatchery facilities.
 - **Fish screens** Strategy based on current program implementation, utilizing improved coordination with sponsors to ensure funds are being allocated effectively for construction and maintenance of screens.

Maturity:

• Second year completing a SAMPs for Lands and Water rights. First year completing a SAMPs for Hatchery and Fish screens.

Redactions:

None

Facilities SAMP

Key Information:

- Provides principled strategies for making capital and O&M sustain investments while incrementally improving the efficiency of program delivery.
- Presents a condition-based framework for determining investment criticality across multiple risk domains in order to inform investment prioritization and potential mitigation.
- Describes the implementation and operational risks, asset condition trajectory and asset performance gaps related to the proposed funding level.

Maturity:

• Second iteration of the SAMP with asset management fundamentals established in 2012.

Redactions:

• Physical security investments removed due to the inclusion of location and cost estimate information

Information Technology SAMP

Key Information:

- Identifies known projects and anticipates unplanned projects.
- Remain a trusted and viable partner, transparently identify and publish the cost for all services characterized as core services provided by IT.
- Develop a layered approach to project prioritization that begins within the IT client business lines and culminates in a cross-agency prioritization of the IT work plan.
- Prioritize core sustain life cycle activities over expansion efforts to the extent possible, with Critical Business Systems taking precedence over Enterprise Business Systems.
- Make every effort to identify current systems that are at life cycle risk and get them back into alignment with their published refresh rates.

Maturity:

Second year completing a SAMP

Redactions:

• Figure 3.3-2 Asset Locations

Fleet SAMP

Key Information:

- Under the current strategy, the average life cycle for BPA owned mobile equipment would be 45 years.
- The Fleet Strategic Asset Management Plan adds key data points to the analysis conducted and is focused on moving to a 20-year replacement strategy to minimize risk, improve equipment availability and take advantage of enhanced safety features of equipment on today's market.
- BPA will optimize our capabilities by ensuring the right equipment, at the right time, for the right cost,
 while also considering multi-use assets and electrification of our passenger vehicles.

Maturity:

First year completing a SAMP

Redactions:

Pricing information

Asset Plan Overview

- Alignment with the SAMP
- Outlines tactical objectives with a 1-2 year focus for achievement of the SAMP, and to outline projects and justification for SOY budget elements directly related to assets
- List of capital project priorities to be worked on in the current year
- SMART tactical objectives for completion of SAMP objectives for asset performance and improvement in the asset management program
- Written for an internal audience and may contain sensitive project information, such as pricing information pre-award; asset criticality; potentially sensitive cyber information, including specific technologies in use; and risk assessments.
 - Three-way ownership of the Fed Hydro BPA, the Corps and the Bureau
- Not related to the IPR process

Understanding the Difference between Strategic Planning and Project Approval

SAMPs and Asset Plans

- Planning that directly supports the agency strategic plan
- Used for IPR and the start of year budgets
- Includes projects being evaluated for implementation during the next IPR, but is not intended to be used for individual project approval
- Supports BPA Asset Management Policies:
 - 460-1 Asset Management
 - 460-2 SAMP's and Asset Plans
 - 460-4 Asset Information Governance

Project Approval

- Defined process for project approvals that includes cost and alternatives evaluations to ensure best use of BPA resources
- Thorough assessment of what, when, why and how of the individual projects
- Includes risk assessments and performance metrics at the independent project level
- Supports BPA Asset Management Policy:
 - 460-3 Capital Authorization
- Projects are proposed by the business line Asset Manager and approved by the Agency Asset Manager, Enterprise Risk Manager and Financial Planning and Analysis Manager

Question and Discussion





