

STAFF DRAFT

**COLUMBIA BASIN HABITAT
RESEARCH, MONITORING
AND EVALUATION
STRATEGY**

In-person meetings

- Workshops (In-person attendance encouraged within existing travel budgets)
 - October 1: Spokane 1:30-4:30 Spokane Public Library
 - October 23: Boise, ID. 9:00-12:00
 - October 28: The Dalles, OR. 9:00-12:00
 - November 13: Portland, OR. 1:00-4:00
- Conference line & go-to meeting link will be available for the above workshops
- Additional meetings to be scheduled as needed

Goals, Principles and Scope of Strategy

- Address the needs of the FWP and the BiOps; apply strategy to habitat RM&E actions
- Provide information to inform ongoing and future habitat programs
- Generate accessible data at multiple scales
- Emphasize adaptive management, synthesis and reporting
- Incorporate existing programs and plans that guide RM&E work
- Provide for extensive input by regional habitat RM&E managers

Habitat RM&E Logic Path

- Habitat impairments and limiting factors directly affect habitat quantity and quality
- Improvement in the status of habitat limiting factors will increase habitat quantity and quality, which will positively affect abundance, productivity, and distribution of focal species

Strategy Focus:

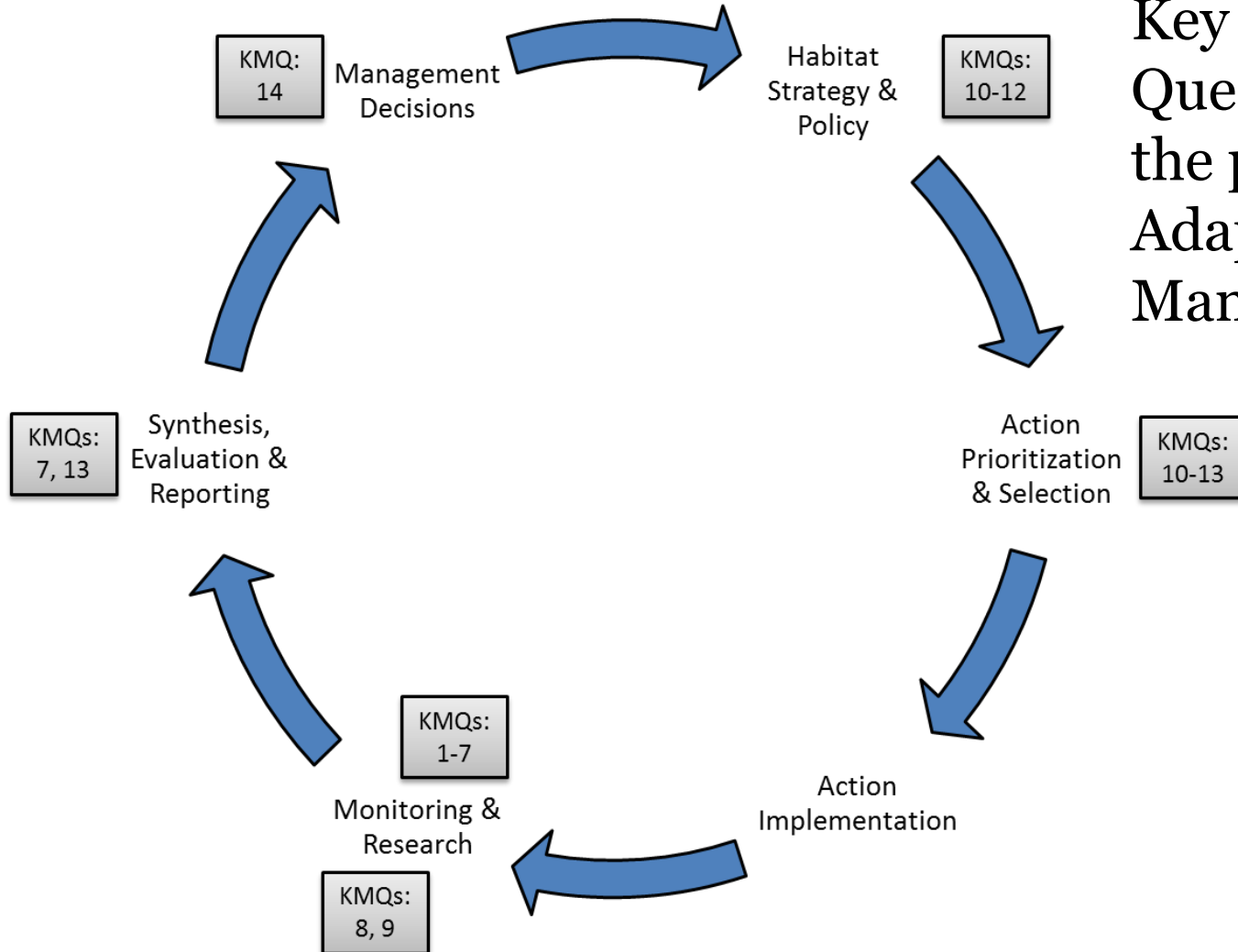
- Habitat RM&E
- Fish RM&E as needed for evaluating habitat effectiveness

Key Management Questions

- Implementation and Compliance (3 KMQs)
 - Relevant legal requirements
 - Best management practices
 - Implementation performance metrics
- Evaluation (5 KMQs)
 - Changes in habitat limiting factors
 - Effectiveness of different actions
 - Changes in fish abundance and distribution
- Prioritization and Management Decisions (6 KMQs)
 - Habitat limiting factors by life-stage
 - Priority locations for habitat work
 - Status and trends of populations
 - Application of information

Adaptive Management

Key Management Questions linked to the phases of Adaptive Management



Compliance and Implementation Monitoring

- Compliance:
 - Use existing BPA environmental compliance processes (e.g. HIP 4 Programmatic)
- Implementation:
 - Work element metrics in BPA contracts
 - Project Notification and Project Completion Forms
 - Annual synthesis and reporting in PISCES Web and contract reports
- Updates to implementation metrics:
 - Tributary Habitat Steering Committee
 - 2019 FCRPS Biological Opinion
 - Council Performance Indicators (2020 Addendum)

Effectiveness Monitoring: Project-scale

- Extensive body of knowledge on project-scale effectiveness monitoring (EM)
- Wrap up AEM Programmatic and other project-scale EM projects
- Leverage other regional project-scale EM programs (e.g. OWEB, SRFB Project Effectiveness)
- Programmatic synthesis of project-scale EM by collaborative group
- Case studies for additional project-scale EM

Effectiveness Monitoring: Watershed-scale

- Evaluation criteria
 - Direct nexus to mitigation, survival or recovery parameters
 - High value of information (mgmt needs, mitigation commitments)
 - Located in focal/priority population
 - Cost effective methods/approach
- Responsive indicators linked to KMQs (Appx. 4 and 5)
- Geospatial framework
 - Physical template: basinwide
 - Ecological template: focal/priority populations
 - Supplemental information: inform decision support tools and prioritization processes
- Guidance for watershed-scale monitoring indicators tied to limiting factors (ecological concerns) by species' life-stage

Status and Trend Monitoring

- Habitat:
 - Emphasizes use of existing habitat S&T data collection by FWP project sponsors, states, Tribes, other federal agencies
 - BPA support for subset of indicators: e.g. temperature, flow
 - Data sharing with regional databases TBD
- Salmon and Steelhead (focused on evaluating effectiveness of habitat actions):
 - Assess freshwater life stages associated with habitat implementation
 - Juvenile & adult abundance and distribution
 - Juvenile productivity
- Resident fish species S&T: *TBD*
- Annual documentation (reports and data in Streamnet/CAX)

Research

- Focused & prioritized to support management needs
- Specifically address KMQs
- Resolve Critical Uncertainties
- Link to Council's Research Plan
- Informed by programmatic synthesis efforts
- Annual documentation (BPA annual RM&E reports and data)

Monitoring Plans

- FWP project sponsors to document how their existing suite of BPA-funded habitat RM&E projects integrate together and connect with the strategy (*TBD*)
- Describe how all relevant KMQs are addressed within their respective project portfolio
- Includes:
 - Species' life-stages of concern
 - Significant limiting factors for those life-stages
 - Linkages to other relevant FWP project sponsor programs
- Desired timeframe for a conceptual process &/or approach *TBD* in advance of 2020-2021
Habitat/Artificial Production category review

Programmatic Synthesis and Reporting

- Synthesis will:
 - Evaluate topical areas (1st synthesis: project-scale EM)
 - Address progress on KMQs
 - Synthesize data to convey state of Critical Uncertainties
- 3-5 Year cycle
- Standing workgroup:
 - Habitat Oversight and Monitoring Entities (HOME) Group
 - Federal, state and tribal entities that implement and monitor habitat actions
- ISAB/ISRP engagement

Program-level Data Management

- Data, metrics & indicators provided to regional structured database(s) and/or centralized repositories
- Specific data management guidelines *TBD*
- Strategy will leverage NPCC's recommended Data Management and Information subcommittee of the Regional Coordination Forum
- All data/metrics/indicators should document appropriate metadata
- Summary information displayed on websites *TBD*

Strategy Roll-out

- Regional review and revision (Phase 2): August 2019-March 2020
- Final strategy to inform BPA FY2021 start-of-year budget reviews and integrated over time
- Final strategy provides guidance for NPCC FY2021 anadromous fish habitat review
- On-going project-scale EM supported through 2023
- Elements of the strategy incorporated into 2020 CRSO Biological Opinion

In-person meetings

- Workshops (In-person attendance encouraged within existing travel budgets)
 - October 1: Spokane 1:30-4:30 Spokane Public Library
 - October 23: Boise, ID. 9:00-12:00
 - October 28: The Dalles, OR. 9:00-12:00
 - November 13: Portland, OR. 1:00-4:00
- Conference line & go-to meeting link will be available for the above workshops
- Additional meetings to be scheduled as needed