

# Spring-run Chinook Salmon Juvenile Production Estimate Core Team DECISION CHARTER

July 2022



Photo by Max Whittaker

Prepared by Kimberly A Horndeski, Community Consulting LLC  
Prepared for Brett Harvey, California Department of Water Resources  
Approved August 2022 by Juvenile Production Estimate Guidance Team



Photo by Friends of the River

## Purpose

The purpose of this charter is to document the decision-making process and authority of the juvenile production estimate Core Team (JPE Core Team) as they develop, evaluate, and recommend a suite of potential approaches to estimate the abundance of spring-run Chinook salmon juveniles in the Sacramento River and its tributaries upstream of the Delta.

## Background

The California Department of Fish and Wildlife (CDFW) issued incidental take permit (ITP) number 2081-2019-066-00 to the California Department of Water Resources (DWR) for the operation of the State Water Project (SWP). The ITP describes the necessary conditions to minimize impacts of the SWP on spring-run Chinook salmon, which are listed as threatened under both the California Endangered Species Act and the Federal Endangered Species Act, among other covered species. Condition of Approval 7.5.2 of the ITP requires DWR to convene an interagency team (JPE Core Team) to support development and implementation of an annual spring-run juvenile production estimate (JPE).

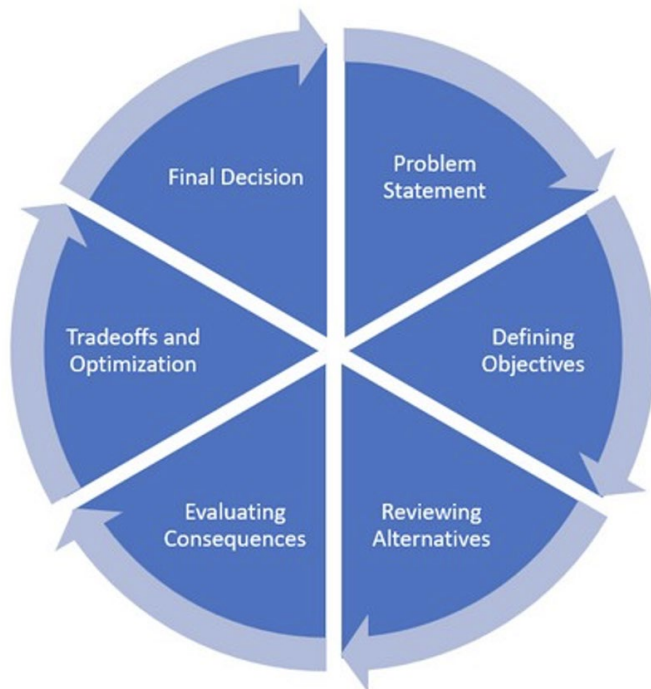
The JPE is expected to be an annual forecast of the number of natural-origin spring-run Chinook salmon juveniles that will enter the Sacramento-San Joaquin Delta in any given year. Once developed and approved by CDFW,

the annual JPE may be used to support new entrainment minimization measures which would augment or replace current entrainment protective measures for spring-run Chinook salmon, as described in Condition of Approval 8.6.6. Also related to development of the JPE is the requirement under the ITP Condition of Approval 7.5.3 to develop a spring-run Chinook salmon life-cycle model, of which the JPE and JPE-related monitoring would serve as a component. While JPE development is currently focused on natural origin spring-run from the Sacramento River basin, restoration of spring-run in the San Joaquin Valley will require consideration of this population in the future.

## Structured Decision-Making Process

The JPE Core Team will use a Structured Decision-Making PrOACT (SDM) process to develop, evaluate, and recommend a suite of potential approaches to estimate the abundance of spring-run Chinook salmon juveniles in the Sacramento River and its tributaries upstream of the Delta. The SDM process provides a formal framework that is clear and transparent to address multidimensional decisions.

**Figure 1 Structured Decision-Making PrOACT (SDM) Process**



The SDM process consists of the following six steps:

- Problem: Defining the decision statement (e.g., actions, scope, constraints, etc.).
- Objectives: Clarifying what is important to consider in the decision-making process (Note: performance measures are also defined in this section).
- Alternatives: Developing a strategy or set of strategies to address the decision statement.
- Consequences: Estimating the effectiveness of each alternative based on the defined objectives (Note: weights are also defined in this section).
- Tradeoffs: Evaluating the risks and benefits of selecting an alternative.
- Selection: Making a final decision or recommendation.

The JPE Core Team is responsible for completing the objectives, performance measures, components of the alternatives, weights, tradeoffs, and selection (or recommendation) (please see the section JPE Teams and Responsibilities for further details).

## JPE Core Team Purpose and Decision Statement

The decision statement outlines the agreed upon purpose or charge of the JPE Core Team. The decision statement identifies the goals the JPE Core Team intend to achieve, scope of the work to be completed, actions that the JPE Core Team members will be taking, constraints to the decision-making process, and a timeframe to complete the identified actions.

The JPE Core Team members established the following decision statement in November 2021, and it was subsequently approved by the JPE Core Team in November 2021:

By April 2024, the JPE Core Team will develop, evaluate, and recommend a suite of potential approaches to estimate the abundance of spring-run Chinook salmon juveniles in the

Sacramento River and its tributaries upstream of the Delta and support the potential development of a life-cycle model and minimization measure as described in ITP COA 7. 5. 2, 7. 5. 3, and 8. 6. 6.

In this process, the JPE Core Team understands that they will not know what form the life-cycle model and/ or minimization measure would take. The JPE Core Team also recognizes the importance of developing an estimate/ forecast of spring-run Chinook salmon juveniles at the point of Delta entry in this process.

The SDM process is intended to be an iterative process while recognizing the importance of consistency, especially when allocating resources. Revisions to the decision statement can only be made with the approval of JPE Guidance Team.

## JPE Teams and Responsibilities

The Incidental Take Permit Spring-run Chinook salmon Juvenile Production Estimate Science Plan 2020–2024 (Science Plan) led to the establishment of six teams (described below) to assist in providing the data, information, and professional expertise for the development of a suite of potential approaches to estimate the abundance of spring-run Chinook salmon juveniles in the Sacramento River and its tributaries upstream of the Delta. The work of the teams is performed under the direction and oversight of the JPE Guidance Team (described below).

The list below defines the responsibilities of each Team based on the SDM process:

### **Decision Statement**

JPE Guidance Team

### **Objectives**

JPE Core Team

**Performance Measure**

JPE Core Team

**Alternatives**

JPE Modeling Team and JPE Data Management Team

**Estimate Consequences**

JPE Modeling Team and JPE Monitoring Team

**Weighting Objectives**

JPE Core Team

**Tradeoffs**

JPE Core Team

**Recommendation**

JPE Core Team

Each team operates independently, is responsible for achieving the intended deliverables, and communicating with relevant teams based on their purpose and/ or respective decision charters. Provided below is a description of each team and how it relates to the operation and function of the JPE Core Team.



Photo by Towns Burgess

## JPE Guidance Team

The JPE Guidance Team is responsible for providing project oversight and administrative functions to support the ITP Condition of Approval 7.5.2 including convening the interagency team (JPE Core Team) and the development of the JPE model and subsequent monitoring. The responsibilities of the JPE Guidance Team as it relates to the JPE Core Team are as follows:

- Confirming and/or adapting the decision statement in the Structured Decision-Making process.
- Ensuring the work of the contractors is compliant with the project needs (e.g., developing the JPE).
- Coordinating and scheduling meetings with all JPE Core Team members.
- Working with facilitators to plan meeting objectives and agendas.

## JPE Modeling Team

The JPE Modeling Team is responsible for developing a JPE model that will provide an annual forecast of the number of natural-origin spring-run Chinook salmon juveniles that will enter the Sacramento-San Joaquin Delta. The responsibilities of the JPE Guidance Team as it relates to the JPE Core Team are as follows:

- Developing and designing alternatives based on the objectives and components of the alternatives developed by the JPE Core Team.
- Reviewing and applying performance measures to each objective in an alternative.
- Estimating applicable consequences for each objective in an alternative.

## JPE Monitoring Team

The JPE Monitoring Team consists of the leads for the JPE Stream Teams and is responsible for coordinating with the Stream Teams, Run ID Team,

Modeling Team, and Data Management Team to develop and implement monitoring strategies for natural origin spring-run Chinook salmon in the Sacramento River basin and Delta in support of developing a spring-run JPE and life-cycle model. The responsibilities of the JPE Monitoring Team as it relates to the JPE Core Team are as follows:

- Advising on the capability of historical monitoring to support JPE Alternatives.
- Reviewing and applying performance measures to each objective in an alternative.
- Estimating applicable consequences for each objective in an alternative.

## JPE Data Management Team

The JPE Data Management Team is responsible for obtaining, curating, and organizing historical data; standardizing future data collection (e.g., developing standard operating procedures and guidelines); and developing a data management structure for Stream Teams to ensure production of machine-readable data, uploading of data in near real-time to shared database, and making data accessible via application programming interfaces. The Data Management Team will coordinate with the JPE Stream Teams, JPE Monitoring Team, and JPE Modeling Team. The responsibility of the JPE Data Management Team as it relates to the JPE Core Team is as follows:

- Providing updates to the JPE Core Team as necessary.

## JPE Stream Teams

The JPE Stream Teams consist of staff implementing spring-run monitoring on each Sacramento River basin stream supporting a spring-run population considered to be independent (as determined by the Core Team), including Deer and Mill Creeks, Butte Creek and Lower Feather River, Tisdale Weir, Knights Landing, Lower Sacramento/Delta Entry, Feather River, and Yuba River. The JPE Stream Teams will provide data and information to the JPE Monitoring Team, Data Management Team, and JPE Modeling Team to develop the JPE model and subsequent monitoring. The responsibilities of



the JPE Stream Teams as it relates to the JPE Core Team are as follows:

- Providing updates to the JPE Core Team as necessary.
- Supporting estimation of consequences.
- Updating monitoring to support future improvements of the JPE approach based on JPE alternatives developed for future implementation.

## JPE Run ID Team

The Run ID Team is composed of geneticists, modelers, and support staff responsible for developing an approach for distinguishing spring-run from other Chinook salmon runs in the Sacramento River basin and Delta. The responsibility of the JPE Run ID Team as it relates to the JPE Core Team is as follows:

- Providing updates to the JPE Core Team as necessary.

## JPE Core Team Members

The JPE Core Team reflects the diversity of knowledge, skills, expertise, and agencies responsible for managing spring-run Chinook salmon in the Sacramento River basin and Delta. Members of the JPE Core Team can be added or removed by the JPE Guidance Team. Members selected to serve on the JPE Core Team must have the necessary skill, knowledge, and/or expertise to engage in the SDM process. Reasons for removing JPE Core Team members include demonstrable lack of participation in the work of the JPE Core Team, not abiding by the outlined ground rules, or agency or organizational personnel changes (i.e., new position, retirement). The JPE Core Team members are expected to serve in their role until the completion of the SDM process or until the JPE Core Team is dissolved by the JPE Guidance Team.

Membership must include at least one representative of the California Department of Water Resources and one representative of the California Department of Fish and Wildlife. The following are the current members of the JPE Core Team:

Spring-run Chinook Salmon Juvenile Production Estimate Core Team Decision Charter

Alison Collins, Metropolitan Water District  
[ACollins@mwdh2o.com](mailto:ACollins@mwdh2o.com)

Anna Allison, California Department of Fish and Wildlife  
[Anna.Allison@wildlife.ca.gov](mailto:Anna.Allison@wildlife.ca.gov)

Barb Byrne, National Oceanic and Atmospheric Administration  
[Barbara.Byrne@noaa.gov](mailto:Barbara.Byrne@noaa.gov)

Brett Harvey, California Department of Water Resources  
[Brett.Harvey@water.ca.gov](mailto:Brett.Harvey@water.ca.gov)

Brooke Jacobs, California Department of Fish and Wildlife  
[Brooke.Jacobs@wildlife.ca.gov](mailto:Brooke.Jacobs@wildlife.ca.gov)

Corey Phillis, Metropolitan Water District  
[CPhillis@mwdh2o.com](mailto:CPhillis@mwdh2o.com)

Erica Meyers, California Department of Fish and Wildlife  
[Erica.Meyers@wildlife.ca.gov](mailto:Erica.Meyers@wildlife.ca.gov)

Flora Cordoleani, National Oceanic and Atmospheric Administration  
[Flora.Cordoleani@noaa.gov](mailto:Flora.Cordoleani@noaa.gov)

Howard Brown, National Oceanic and Atmospheric Administration  
[Howard.Brown@noaa.gov](mailto:Howard.Brown@noaa.gov)

Jason Kindopp, California Department of Water Resources  
[Jason.Kindopp@water.ca.gov](mailto:Jason.Kindopp@water.ca.gov)

Matt Brown, U. S. Fish and Wildlife Service  
[Matt\\_Brown@fws.gov](mailto:Matt_Brown@fws.gov)

Michael Harris, California Department of Fish and Wildlife  
[Michael.R.Harris@wildlife.ca.gov](mailto:Michael.R.Harris@wildlife.ca.gov)

Pete Nelson, California Department of Water Resources  
[Peter.Nelson@water.ca.gov](mailto:Peter.Nelson@water.ca.gov)

Sheena Holley, California Department of Fish and Wildlife  
[Kimberly.Holley@wildlife.ca.gov](mailto:Kimberly.Holley@wildlife.ca.gov)

Towns Burgess, Bureau of Reclamation  
[OBurgess@usbr.gov](mailto:OBurgess@usbr.gov)

## Member Responsibilities

The JPE Core Team members are expected to fully participate and provide feedback based on their professional experience, and current job function. To foster collaborative discussions and facilitate informed decision making, members are expected to abide by meeting ground rules, attend meetings and complete meeting assignments. Each expectation is described below.

### Abide by Meeting Ground Rules

In May 2021, the JPE Core Team identified 10 meeting ground rules that all members must abide by in each meeting. The meeting ground rules are as follows:

- Actively listen to each other.
- Speak up and actively engage with the group.
- Be patient with each other.
- When you see it, say it (no hidden agendas).
- Be willing to have an open mind.
- Listen and let go as necessary.
- Commit your time to the group.
- Be clear about expectations, especially if you cannot complete a task.
- Understand the role of individuals within each agency.
- Understand what the agency's role will be to reach its goals (or success).

### Attend Meetings

The JPE Core Team members are expected to attend every meeting or provide prior notice to Brett Harvey if they are unable to attend. Meetings

will be held online, using the Zoom platform. JPE Core Team members should have their cameras on, be actively engaged in the conversation, and avoid multi-tasking during meetings.

## **Complete Assignments**

The JPE Core Team meetings will focus on providing a forum for collaborative discussions to develop, evaluate, and recommend a suite of potential approaches to estimate the abundance of spring-run Chinook salmon juveniles in the Sacramento River and its tributaries upstream of the Delta. Members are expected to prepare for each meeting by reviewing the agenda and additional supplemental materials to engage in the meeting efficiently and effectively. In some instances, this will mean completing “prep” or “post” work. If a member is unable to complete the outlined work, they are responsible for informing Brett Harvey as soon as possible.

## **Decision-Making Process**

The JPE Core Team will strive to understand each other’s perspectives and incorporate those perspectives into a shared framework in the development of the recommendations for a Juvenile Production Estimate model and subsequent monitoring. The JPE Core Team meetings are designed to provide an opportunity for all members to share their perspectives in a discussion-based format. Prior to implementing a decision-making process, each JPE Core Team member is responsible for voicing their opinion and reasoning in support or opposition of a decision.

## **Decision Authority**

The JPE Core Team has decision authority in four areas of the Structured Decision-Making process for the recommendations for a Juvenile Production Estimate model and subsequent monitoring. The four areas are as follows:

- Develop clear objectives that reflect the values of the JPE Core Team members and associated organizations/agencies.
- Identify effective performance measures that will adequately estimate the ability of the objectives to achieve their intended results.
- Determine the weights associated with each objective, if applicable, in the “Trade-offs” step of the Structured Decision-Making process.

- Recommend a Juvenile Production Estimate model and subsequent monitoring based on an evaluation of how well each objective achieves its intended results (tradeoffs).

It is important to note that recommendation of a modeling and monitoring approach do not ensure those recommendations will be implemented. The implementation decision lays with the DWR (the permittee), and CDFW (the permitter) via a separate adaptive management process described in the ITP.

## Initiating a Decision

To initiate the decision-making process, the JPE Core Team members must be notified via the agenda when decisions on the four areas will occur in a meeting. Only JPE Core Team members that are present in the meeting can participate in the decision-making process. A proxy or representative vote cannot be used. Furthermore, each JPE Core Team member that is present to vote has an equal weighted "vote" in the decision-making process. All JPE Core Team members, including those that could not attend a meeting, will be notified of the results of the decision process and/or dissenting opinions via meeting notes.

The facilitators initiate the decision-making process with the statement "Are we comfortable moving forward with...". The JPE Core Team will indicate their agreement using a gradients of agreement decision framework known as "Fist of Five" to confirm all decision in the listed four areas of the Structured Decision-Making process. The Fist of Five framework allows the JPE Core Team to explore differences, understand perspectives and concerns, and move forward collectively. The Fist of Five framework is defined as follows:

- Five means "I am in full support to move forward."
- Four means "I think it is a reasonable idea and we can move forward."
- Three means "I am not in total agreement, but we can move forward."
- Two means "I need to discuss and am not comfortable moving forward."
- One means "I cannot move forward with the current proposal."

Please note that only the facilitators can call for a vote. The facilitator and/or JPE Core Team members can call to use a Fist of Five process to confirm additional processes, however, these are not considered “official” JPE Core Team decisions and do not require the additional documentation. For example, a JPE Core Team member could ask “are we comfortable meeting for two hours on Tuesday, let’s Fist of Five” or the facilitator could ask “are you comfortable with how I have written the notes, let’s Fist of Five.”

## Confirming a Decision

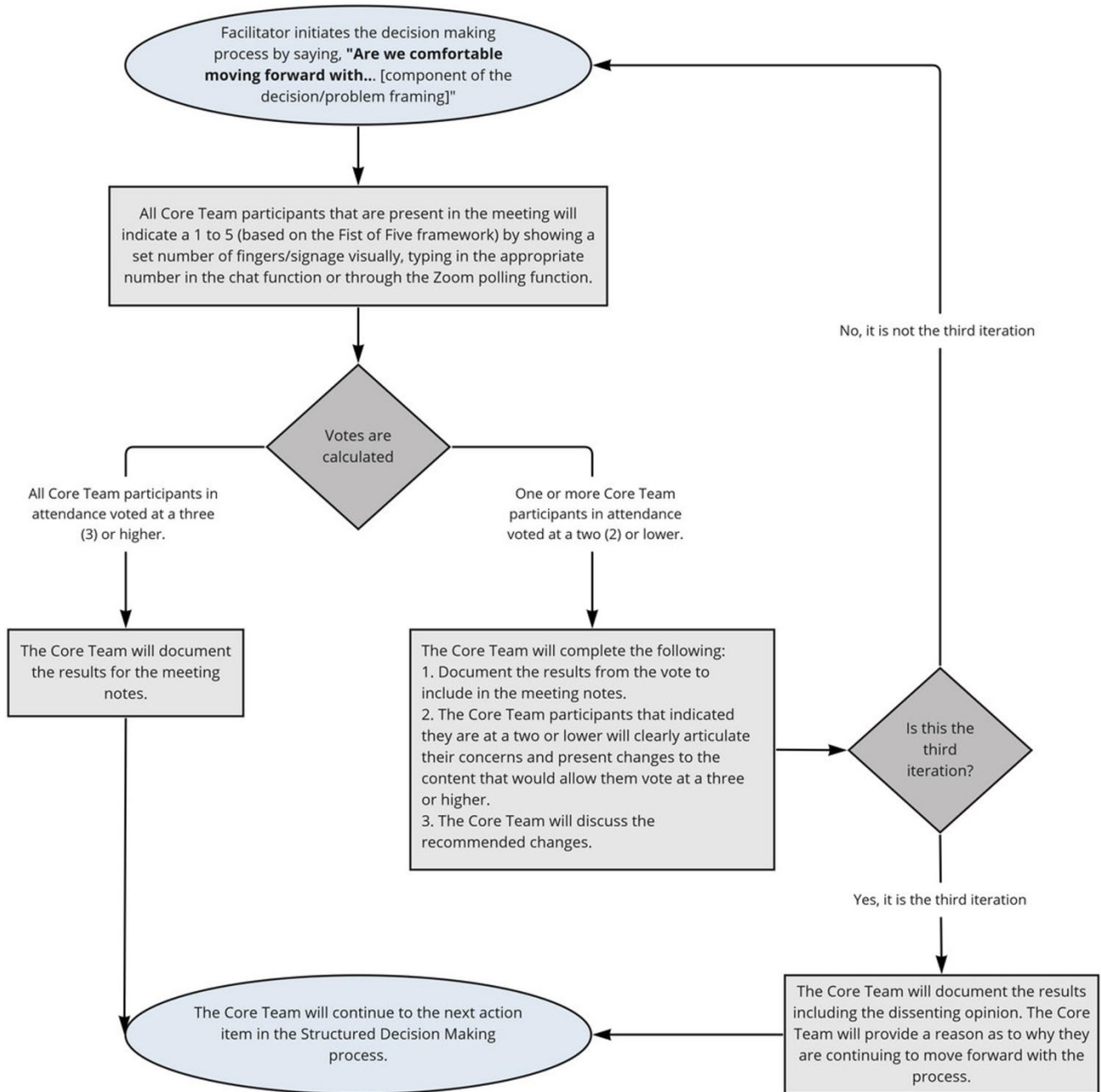
Once a vote is called by the facilitator, all Core Team participants that are present in the meeting will indicate a one to five (based on the Fist of Five framework) by showing a set number of fingers/signage visually, typing in the appropriate number in the chat function or through the Zoom polling function. The votes will then be calculated.

If all JPE Core Team members present vote a three or higher, the JPE Core Team will document the results of the vote in the meeting notes and continue to the next action item on the meeting’s agenda.

If one or more JPE Core Team members in attendance voted at a two or lower, the JPE Core Team will document the results from the vote to include in the meeting notes, the JPE Core Team members that voted at a two or lower will clearly articulate their concerns and present changes to the content that would allow them vote at a three or higher, and the JPE Core Team will discuss the recommended changes.

Once discussion is completed, the facilitator can call for a second vote. The same process will occur for a maximum of three iterations on the same decision point. On the third iteration, if one or more JPE Core Team members in attendance vote a two or lower, the Core Team will document the results including the dissenting opinion. In addition, the JPE Core Team will provide a reason as to why they are continuing to move forward with the process. The JPE Guidance Team will review the reasoning provided with their respective executive authorities and determine how to move forward.

**Figure 2 Decision-Making Process Flow Chart**



## Communication Plan

The JPE Core Team is responsible for communicating the following via workshops, meetings, and emails:

- Articulating objectives as defined in the Structured Decision-Making Process to the JPE Modeling Team and JPE Monitoring Team and sub-Teams as needed.
- Identifying effective performance measures that will adequately estimate the ability of the objectives to achieve their intended results.
- Identifying key components of alternatives as defined in the Structured Decision-Making Process to the JPE Modeling Team and JPE Monitoring Team.
- Developing clear and transparent justifications for the recommended selection to the JPE Guidance Team (including describing selected weights and tradeoffs).

## Revisions

This decision charter is intended to be an adaptive, “living document” to ensure it remains applicable to the JPE Core Team. This charter should be reviewed/updated at a minimum every year to ensure it is up-to-date and incorporates any changes necessary. Changes to the decision charter need to be approved by the JPE Core Team and the JPE Guidance Team. This decision charter will be in effect until the JPE Guidance Team determine it is no longer warranted and the work of the JPE Core Team been completed.

The decision charter was updated and approved on August 26, 2022. The next update is scheduled for July 2023.

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