What to Expect When You're Expecting a Charette

Pre-Charette Workshop

US Army Corps of Engineers
BUILDING STRONG®

Why are we here?

Civil Works Transformation

Budget Prioritization

Methods of Delivery

Infrastructure Management

Planning Modernization

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Purpose of the Charette

Is to help the PDT move forward toward completing a SMART feasibility study and ensure that the Vertical Team is aligned with the proposed direction.

Seven Pieces of Paper

Tell the Story…

of the Study based on EXISTING data only.

1. Problems & Opps
2. Objectives & Constraints
3. Decision Criteria
4. Key Uncertainties
5. Without Project Condition
6. Measures
7. Formulated Plans

- Must be developed with the whole PDT.
- The Seven Pieces of Paper form the heart of the decision document.

Charette Expectations & Outcomes

Typical Products Include:

- A Decision Management Plan
- A Risk Register
- Report Synopsis

Other Outcomes May Include:

- Clear Planning Objectives
- A focus on the Tentatively Selected Plan and the Locally Preferred Plan only

The charette is not just an exercise!!

SMART Planning Basics

Specific, Measurable, Attainable, Risk-informed, Timely

- Decision based planning

- Focused on making the next decision while scoping for the decision after that.

- Managing uncertainty (and budgets and schedules) to allow for making planning decisions with uncertainty.

- Decisions under uncertainty.

- The Goal is 3x3x3

SMART Planning Decision Point Milestones

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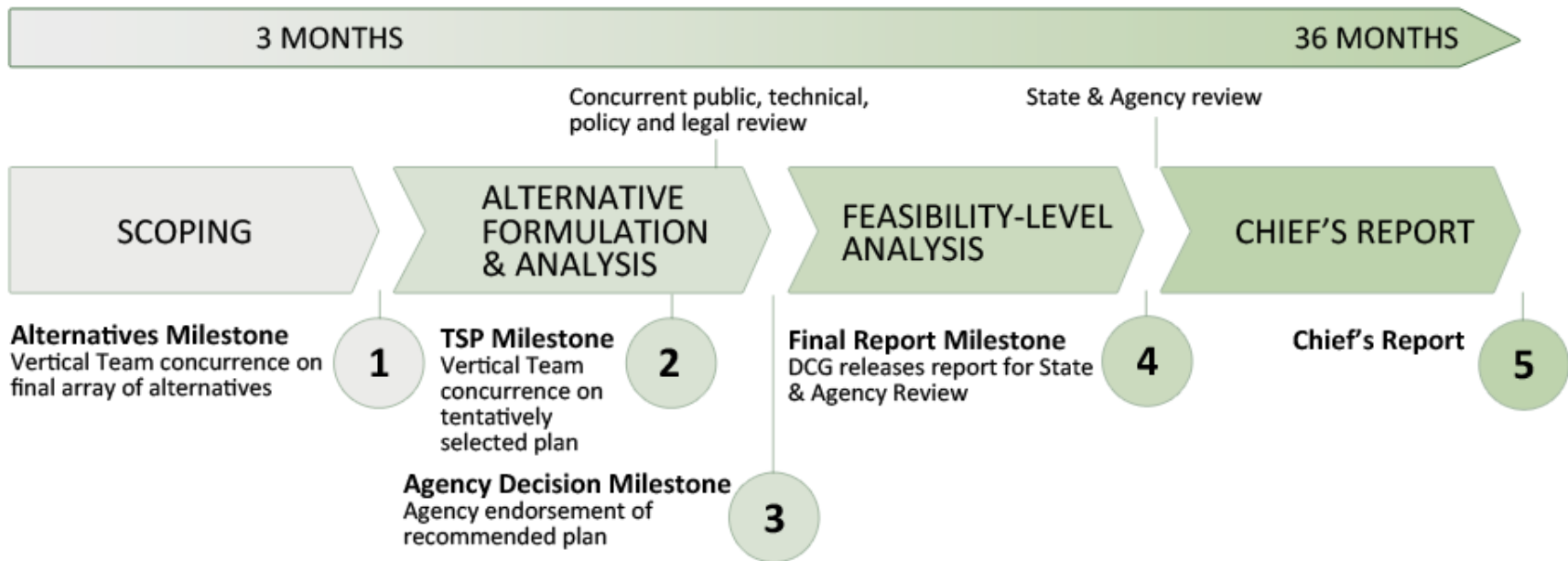
6 Step Planning Process

Step 1 – Identifying Problems and Opportunities

Problems: Existing, negative conditions

Example: Flood damages in the commercial section of Glendive, Montana.

Opportunities: Focus on desirable, future conditions.

Example: Restore native fish species in the lower Yellowstone River.

Objectives: Statements that describe the results you want to get by solving the problems and taking advantage of the opportunities you identified.

Example – Reduce (*effect*) flood damages (*subject*) in the City of Glendive (*location*) through the year 2030 (*time/duration*).

Constraints: Statements about things you want to avoid doing, or things you cannot change, while meeting your objectives.

Example – Avoid effects on habitat of the Federally endangered pallid sturgeon in the lower Yellowstone River.

Step 2 – Inventory and Forecast

Inventory: Describe historic and existing conditions.

Forecast: Informed guess about the future, a future condition or scenario. Used to define the base condition, future without project condition and the future with project condition.

KEEP CALM AND CARRY ON

Step 3 – Formulating Alternative Plans

Management Measure :

Feature or activity that can be implemented to address one or more planning objective.

Examples: Levee, fish passage, flood proofing homes, recreation trail

Alternative Plan :

One or more management measures functioning together to address one or more objectives.

Step 4 – Evaluating Alternative Plans

How do you evaluate plans?

- Forecast the most likely with-project condition
- Compare each with-project condition to the without- project condition
- Characterize effects (difference between with and without project conditions)
- Magnitude, location, timing/duration, appraisal (good/bad)
- Qualify plan for further consideration (pass/fail)

Step 5 – Comparing Alternative Plans

Compare plans against each other

- Benefit Cost Ratio
- Cost Effectiveness/ Incremental Cost Analysis
- Trade-off Analysis

Step 6 – Selecting a Plan

What are your choices?

- No Action
- NED/Most Cost Effective
- Locally Preferred Plan
- Other?

Decision Management Plan

The DMP belongs to the entire Vertical Team not just the PDT

1. The Planning Decision to be Made
2. Sequence of Events Required
3. Criteria for Deciding
4. Decision Makers
5. Schedule for Decision
6. Decision Summary (to be completed when decision is made)

1-5 are done at charette, 6 when decision is made

Risk Register

Grades risk in terms of:

- Likelihood of occurrence
- Seriousness of impact on study/project

Considers uncertainty around risk.

Risk = Probability x Consequence

Risk Register

Identifies:

Risks the PDT and Corps are willing to tolerate

Ways the PDT will manage risk

Documents mitigation strategies

Grades mitigation strategies in terms of likelihood and consequence.

Exercise

Purpose of Island of Modernania Exercise?

STEPS of Exercise: one iteration of the bee hive

Steps of Exercise:

For the purpose of the exercise we will just go through one iteration of the 6 Step Planning Process

We also discuss the DMP and the Risk Register

Dangerous Species on the island:

Genius: Climate Species: change
Climate change
Aggressive and unpredictable

Genius: National Species: debt
National debt
Illusive, deadly can cause paralysis

Genius: Sea Level Species: rise
Sea Level rise
Aggressive and agile and strong

Genius: Project Species: backlog
Project backlog
Thorny to touch, but is plentiful in the coral

Beneficial Species on the island:

Genius: Budget Species: prioritization
Budget prioritization
Intelligent, great swimmer, can be used to cover great distance

Genius: Infrastructure Species: strategy
Infrastructure strategy
Large, massive, great resource but hard to handle

Genius: Asset Species: management
Asset management
Food source to be managed

Genius: Methods of Species: delivery
Methods of delivery
Food source to be managed

Elements on the Island:

Pirates of Global Trade and Commerce

Genius: Rare Species: bird
Rare bird
Cannot touch, cannot fly…
Critical to NEPA

Waterlines on Trees…

"Island of Modernania"

Gulf of Aging Infrastructure and Land Development

Pirates of Global Trade and Commerce

We are stuck here

Team USACE

Sea of Terrible Fiscal Hardship and Partisanship

Barrier Reef of Finite Resources

N

Problems and Opportunities…

"Island of Modernania"

Gulf of Aging Infrastructure and Land Development

Pirates of Global Trade and Commerce

We are stuck here

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Objectives and Constraints…

Inventory and Forecasting…

"Island of Modernania"

Gulf of Aging Infrastructure and Land Development

Pirates of Global Trade and Commerce

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Formulating Alternative Plan…

"Island of Modernania"

Gulf of Aging Infrastructure and Land Development

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Evaluating Alternative Plans…

"Island of Modernania"

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Comparing Alternative Plans

"Island of Modernania"

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Selecting a Plan…

Develop a DMP…

Risk Register

Consequence Rating
High: the consequence of this undesirable result is unacceptable based on evidence.
Medium: the consequence of this undesirable result is borderline tolerable/unacceptable based on evidence.
Low: the consequence of this undesirable result is tolerable/acceptable based on evidence.
None: there are no undesirable consequences based on evidence.

Likelihood Rating
High: the probability of this undesirable result is unacceptable based on evidence.
Medium: the probability of this undesirable result is borderline tolerable/unacceptable based on evidence.
Low: the probability of this undesirable result is tolerable/acceptable based on evidence.
None: the probability of undesirable results is zero or so low as to be effectively treated as a zero based on evidence.

Uncertainty Rating
High: there is little to no concrete evidence available
Medium: there is some good evidence and some significant data gaps
Low: good evidence is available, data gaps are not significant
None: all relevant facts are known

Determination of Risk Rating

Consequence Factor

Probability	High	Medium	Low	None
High	High	High	Medium	None
Medium	High	Medium	Low	None
Low	Medium	Low	Low	None
None	None	None	None	None

Logistics for Your Charette

Dates:

Location:

Building Access:

Start Time:

Who will be there:

What to bring:

Lessons Learned

Feedback from Previous Charettes

Feedback Forms for this Charette

Charette Feedback Form

US Army Corps of Engineers ®

Please take a few minutes to provide your comments regarding the Charette and place your completed feedback form in the box provided by your Facilitator.

Project: _____

Date of Charette: _____

Please provide your comments below:

Facility:_____
_____

Facilitator:_____
_____
_____

Products of Charette:_____
_____
_____

Time Management:_____
_____

Vertical Team Participation and Guidance: _____
_____
_____