

Island of Modernania 6 Step Planning Process



Why are we doing this?

The Corps and our Civil Works program are at a critical tipping point based on the country's physical and fiscal condition. Civil Works Transformation is our signal that we stand ready to address the present conditions that are challenging our agency, our infrastructure and our country's ability to sustain itself. This initiative has generated momentum that is rippling through our organization, allowing our agency to step up and take on the responsibility to evaluate our Civil Works process and demand transformation.

The response has created the Four Pillars of Transformation: Planning Modernization, Budget Prioritization, Asset Management and Methods of Delivery. Planning Modernization is the pillar that pertains to our agency's planning process and it has ignited SMART Planning, which is now being rolled out through interactive charettes. The charette is one of the tangible ways in which the PDTs can learn, contribute, and can touch Planning Modernization at the District level. Our agency must progressively plan, evolve and become much more agile to survive the current national conditions.

Island of Modernania Exercise:

This exercise is about acknowledging and facing our agency's current situation, while walking through the 6 Step Process. The exercise parallels our Civil Works Transformation and Planning Modernization to being stranded on a deserted island. The goal is finding a way to adapt and survive. The PDT must complete the 6 Step Process to get off the island and survive.

An Advocate will lead the PDT through the 6 Step Planning Process by using the Island of Modernania. A casual workshop format the Advocate will create a positive exchange for the PDT through a simplified version of the planning process. It is the hope of this exercise to take the complex task of Project Planning at the Corps, and make it tangible, understandable and implementable. The exercise will revitalize and awaken the PDT's skills as Planners and bring to the surface a "free flow" of ideas for having conversations, generating planning decisions, using professional judgment, determining data relevance and assessing risk.

The PDT will generate the "Two Sheets of Paper" for being stranded, the first for Problems and Opportunities, and the other for Objectives and Constraints. In this process the PDT will then go through:

- Step 1: Identifying Problems, Opportunities, Objectives and Constraints,
- Step 2: Inventory and Forecasting

- Step 3: Formulating Alternative Plans
- Step 4: Evaluate Alternative Plans
- Step 5: Compare the Plans
- Step 6: Select a Plan to try and get off the island successfully

Following the generation of a Selected Plan, the PDT will develop a Decision Management Plan followed by a Risk Register for the island.

Each Step should be provided 20-30 minutes.

The Advocate should provide the PDT with a positive interaction in the pre-charette phase of SMART Planning. The Advocate will provide the PDT with an exchange that demonstrates to the team that they can do this process. Not only can they do it, but they can do it well.

Island of Modernania's Base Information and Existing Conditions:

The Advocate's first step will be providing the PDT with reconnaissance level information about the Island of Modernania. As in the PDT's project some information is relevant and some is not.

The PDT is stranded on the Island of Modernania. This happened due to a harbor tour going awry when a tropical storm entered into the region unexpectedly. The vessel that your PDT was capsized and your team barely had time to get onto an emergency inflatable boat. The storm pulled your team out into the ocean, and after many hours of calamity, you somehow ended up on the Island of Modernania.



Known Island Conditions:

- 1) Days have passed, the Coast Guard found your original vessel and declared there to be no known survivors. Currently, no one is looking for your team.
- 2) The island is approx. 3.2 acres in size
- 3) One third of the island is above water and 2/3rds are underwater
- 4) The portion of the island that is 2/3rds underwater is sharp coral that limits access on and off the island
- 5) The northeast portion of the island has vegetation - this vegetated area is one of your only sources for shade and structure material
- 6) Vegetation ranges in height from 3' to 15'
- 7) The deflated raft is on the shoreline
- 8) The season is late Summer (hurricane season)
- 9) Your engineers know that there is seasonal accretion and erosion of the shoreline. Material is deposited in the spring and erodes in the fall. Quantities and lateral extent are unknown.
- 10) Markings on the vegetation trunks, internal tidal pools and marshes are evidence that the island gets inundated frequently (weekly and at high tide)
- 11) Gulf of Aging Infrastructure is to the northwest
- 12) Barrier Reef of Finite Resources to the southwest
- 13) Sea of Terrible Fiscal Hardship and Partisanship
- 14) Pirates of Global Trade and Commerce pass at a very far distance: they do not know you are there yet...
- 15) Currents to the west side of island look intense...similar to Alcatraz velocity in SF Bay
- 16) There is one boardwalk structure on the island that provides access to the edge of the coral on the southeast side of the island - your archaeologist can tell it was built by a local indigenous group (tribe) and serves as access for some form of annual ceremonial visitation to the island. Symbols of a bird and its egg are present on the boardwalk.
- 17) The tribe does pass by off shore at times to inspect your arrival. They sent out a bottle (aligned with the currents) with a letter that explains the island is home to a very sacred and rare bird (that cannot fly). It states that they visit the island yearly to bring back one of its eggs to their community as a gift from the gods they worship. They state that any harm to the bird, its eggs, its habitat or the boardwalk will result in your team's extermination. They will not interact or help your PDT with getting off the island, due to their fear of disease transfer, unless they have to...
- 18) The tribe is considered a stakeholder in your task
- 19) The coral appears to be a great source of fishing although its composition is dangerous and sharp. The coral attracts a diverse range of species (both dangerous and beneficial) for harvesting.
- 20) Species that are present along the islands edges:

Potentially Dangerous Species:



Genius: Climate Species: change
Climate Change
Aggressive and unpredictable



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



Genius: National Species: debt
National Debt
Illusive, deadly, may cause paralysis



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

Potentially Helpful Species:



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



Genius: Infrastructure Species: strategy
Infrastructure Strategy
Large and massive, great resource but hard to handle entire mass



Genius: Asset **Species:** management
Asset Management
Food source to be managed carefully



Genius: Methods of **Species:** delivery
Methods of Delivery
Food source to be managed carefully

Step 1: Identifying Problems & Opportunities then Objective & Constraints on Modernania:

- Problems: Existing, negative conditions
Example at USACE: Flood damages in the commercial section of Glendive, MT.
- 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 on Modernania:

- 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.

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
 - BCR
 - CE/ICA
 - Trade-off Analysis

Step 6: Selecting a Plan:

- What are your choices?
 - No Action
 - NED/Most Cost Effective (Modernania...what is the most efficient utilization of the sparse resources on the island)
 - LPP (What would the tribe prefer you to do?)
 - Other?

Decision Management Plan:

The DMP helps the team focus on the next planning decision that must be made to propel the project forward. The DMP includes:

- A statement of the planning decision to be made
- The sequence of events required to make the decision
- A list of agreed upon criteria for making the decision
- A list of agreed upon decision makers for THIS decision (should vary by decision)
- A schedule for when the decision must be made
- A summary of the decision to be completed when decision is made

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 result is tolerable or 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