***Table 1: Stacked Table Example as Applied to Flood Risk Management***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Federal Objectives** | Maximize Economic Development | Avoid Unwise Use of Floodplains and Flood Prone Areas | Protect and Restore Natural Systems |  |
| **Guiding Principles** | Sustainable Economic Development | Floodplains | PublicSafety | Healthy and Resilient Ecosystems | EJ / Equity | Watershed Approach |  |
| **Planning Objectives (See Table 2)** | Obj 1 | Obj 1 | Obj 1 | Obj 4 | Obj 5 | Obj 2 | Obj 2 | Obj 3 | Obj 6 | Obj 7 |  |
| **P&G Accounts** | NED | NED | NED | NED | RED | OSE | OSE | EQ | OSE | OSE |  |
| **Formulation/Evaluation Criteria** |  | Efficiency | Effectiveness | Effectiveness | Effectiveness | Effectiveness | Effectiveness | Completeness | Acceptability |
| **Metrics** | Cost | BCR | Annual NED Benefits | Recreation Benefits | Annual RED Benefits | Structures at Risk | Life Safety Risks Reduced | ER Benefits | EJ Benefits | Comprehensive Plan | Accounts for Necessary Investments | Implementability | Satisfaction |
| **No Action Alternative** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 1:Economic Focus E** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 2:Environmental Focus L N** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **RECOMMENDED - Alternative 3: Sponsor Requested P** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 4: Life Safety Focus S** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 5:Balanced Plan T** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Plan identification: TTotal Net Benefits, ENED Plan, LLEDPA, NNon-Structural Plan, PLocally Preferred Plan, SLife Safety Plan (meets TRG 1 and 4) |

***Table 2: Example Flood Risk Management Planning Objectives for Table 1***

|  |  |
| --- | --- |
| **Obj 1** | ***Reduce the risk of economic losses due to flooding in the study area over the period of analysis***  |
| **Obj 2** | ***Reduce the risk of life loss due to flooding in the study area over the period of analysis*** |
| **Obj 3** | ***To the extent practicable and consistent with the primary project purpose of flood risk management, improve ecosystem structure function, and dynamic processes in the study area*** |
| **Obj 4** | ***To the extent practicable and consistent with the primary project purpose of flood risk management, improve recreation opportunities in the study area*** |
| **Obj 5** | ***To the extent practicable and consistent with the primary project purpose of flood risk management, improve regional economic activity*** |
| **Obj 6** | ***Consistent with the primary project purpose of flood risk management, seek to benefit all communities in the study area in a proportionate and equitable manner*** |
| **Obj 7** | ***Develop comprehensive solutions that take into account interconnected systems including upstream and downstream effects*** |

***Table 3: Metrics Table Example as Applied to Deep Draft Navigation***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Metrics** | **Cost** | **Annual NED Benefits** | **BCR** | **Annual RED Benefits** | **RED Benefits for EJ Communities** | **AAHUs** | **Cost / HU** | **Vessel Safety** | **Completeness** | **Implementability** |
| **SCENARIOS** |  | FORECAST A | FORECAST B | FORECAST A | FORECAST B |  |  | FORECAST A | FORECAST B |  | FORECAST A | FORECAST B |  |  |
| **No Action Alternative** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 1: Deepening** |
| **Alt 1a: -56 feet** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alt 1B: -57 feet E** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alt 1C: -58 feet** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 2: Deepening (-57 feet) + widening** |
| **Alternative 3: Deepening, Widening and Beneficial Use of Dredged Material** |
| **Alt 3a: -56 feet L** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alt 3B: -57 feet T** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alt3C: -58 feet P (RECOMMended)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Plan identification: T Total Net Benefits, ENED Plan, LLEDPA, PLocally Preferred Plan |

***Table 4: Metrics Table Example as Applied to Ecosystem Restoration***

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Metrics** | **Cost** | **AAHUs** | **Significance of Outputs** | **Cost/ AAHU** | **River Miles Reconnected** | **Floodplain Restored** | **Recreation Benefits** | **Annual REDBenefits** | **EJ Benefits** | **Implementability** | **Satisfaction** | **Completeness** |
| **No Action Alternative** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 1: Aquatic Habitat Focus  R L (RECOMMended)** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 2: Floodplain Habitat Focus**  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 3: Recreation Focus P** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Alternative 4: Balanced Plan T** |  |  |  |  |  |  |  |  |  |  |  |  |
| Plan identification: TTotal Net Benefits, RNER Plan, LLEDPA, PLocally Preferred Plan |

***Table 5: Formulation and Evaluation Criteria Table as Applied to Coastal Storm Risk Management***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **No Action**  | **Alternative 1: Economic Focus E** | **Alternative 2: Non-Structural L N** | **Alternative 3: Life Safety Focus S** | **RECOMMENDED - Alternative 4: Balanced Approach TP** |
| **Completeness** |  |  |  |  |  |
| **Acceptability** |  |  |  |  |  |
| **Effectiveness** |  |  |  |  |  |
| **Efficiency** |  |  |  |  |  |
| *Plan identification: TTotal Net Benefits, ENED Plan, LLEDPA, NNon-Structural Plan, PLocally Preferred Plan, SLife Safety Plan (meets TRG 1 and 4)* |

***Table 6: Objectives Table as Applied to Coastal Storm Risk Management***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Federal Objectives** | **Guiding Principles** | **PlanningObjectives**  | **No Action**  | **Alternative 1: Economic Focus E** | **Alternative 2: Non-Structural L N** | **Alternative 3: Life Safety Focus S** | **RECOMMENDED - Alternative 4: Balanced Approach TP** |
| Maximize Economic Development | Sustainable Economic Development | Objective 1: Reduce economic damages associated with coastal storms |  |  |  |  |  |
| Avoid Unwise Use of Floodplains and Flood Prone Areas | Floodplains | Objective 2: Reduce life safety risks associated with coastal storms |  |  |  |  |  |
| Public Safety |
| Protect and Restore the Function of Natural Systems | Healthy and Resilient Ecosystems | Objective 3: Improveaquatic ecosystems to the extent practicable |  |  |  |  |  |
|  | Environmental Justice and Equity | Objective 4: Benefit EJ Communities in the study area |  |  |  |  |  |
| *Plan identification: TTotal Net Benefits, ENED Plan, LLEDPA, NNon-Structural Plan, PLocally Preferred Plan, SLife Safety Plan (meets TRG 1 and 4)* |

***Table 7: Metrics Table as Applied to Coastal Storm Risk Management***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ALTERNATIVES** | **No Action**  | **Alternative 1: Economic Focus E** | **Alternative 2: Non-Structural L N** | **Alternative 3: Life Safety Focus S** | **RECOMMENDED - Alternative 4: Balanced Approach TP** |
| **Sea Level Rise Scenarios** | **LOW** | **MEDIUM** | **HIGH** | **LOW** | **MEDIUM** | **HIGH** | **LOW** | **MEDIUM** | **HIGH** | **LOW** | **MEDIUM** | **HIGH** | **LOW** | **MEDIUM** | **HIGH** |
| **P&G Accounts** | **Metrics** |
|  | COST |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| National Economic Development | Annual NED Benefits (Obj.1) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BCR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Annual Recreation Benefits (Obj. 1) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Regional Economic Development | Annual RED Benefits |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Environmental Quality | ER Benefits (Obj. 3) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Environmental Effects |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other Social Effects | Life Safety Risks Reduced (Obj.2) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| EJ Benefits (Obj. 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Plan identification: TTotal Net Benefits, ENED Plan, LLEDPA, NNon-Structural Plan, PLocally Preferred Plan, SLife Safety Plan (meets TRG 1 and 4)** |