

Shared Vision Planning **Stakeholder Involvement in the Technical Analysis**

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JOINTISZA PROJECT

'Strengthening cooperation between river basin management planning and flood risk prevention to enhance the status of waters of the Tisza River Basin

WP6 Activity 6.4 Pilot on climate change induced specific water quantity issues
Shared Vision Planning Pilot Methodology and Stakeholders workshop

26-27 October 2017, Szolnok, Hungary

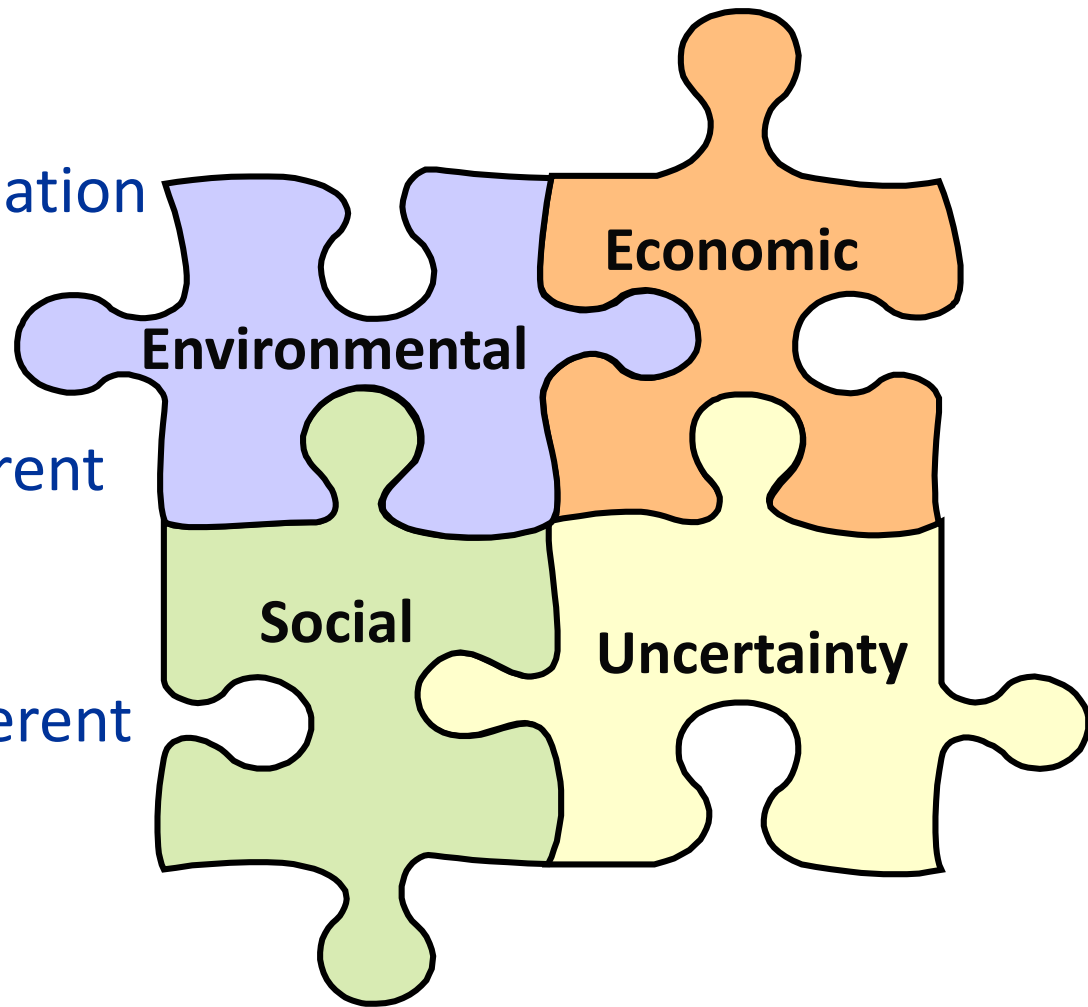
Project co-funded by the European Union (ERDF, IPA funds)

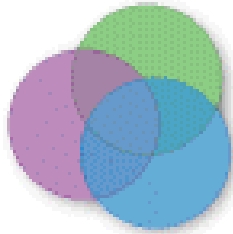
Implementing IWRM is **Hard**

- Persistent conflict over interests & values
- Complexity & uncertainty in overlapping systems
 - **Natural systems:** hydrology, ecology etc.
 - **Human systems:** infrastructure, policy, funding, etc.
- Requires “sound science” (physical and social)
- Stakeholder Involvement is **imperative**

Need to Integrate **Technical Information** within a **Collaborative process**

- Lots of environmental, economic, & social information
- Information is at different levels of detail
- Interest groups have different levels of technical sophistication
- Interests groups have different desires for participation





Shared Vision Planning

- PLANNING PRINCIPLES
- SYSTEMS MODELING
- COLLABORATION

...integrates tried-and-true **planning principles**, **systems modeling** and **collaboration** into a practical forum for making resource management decisions

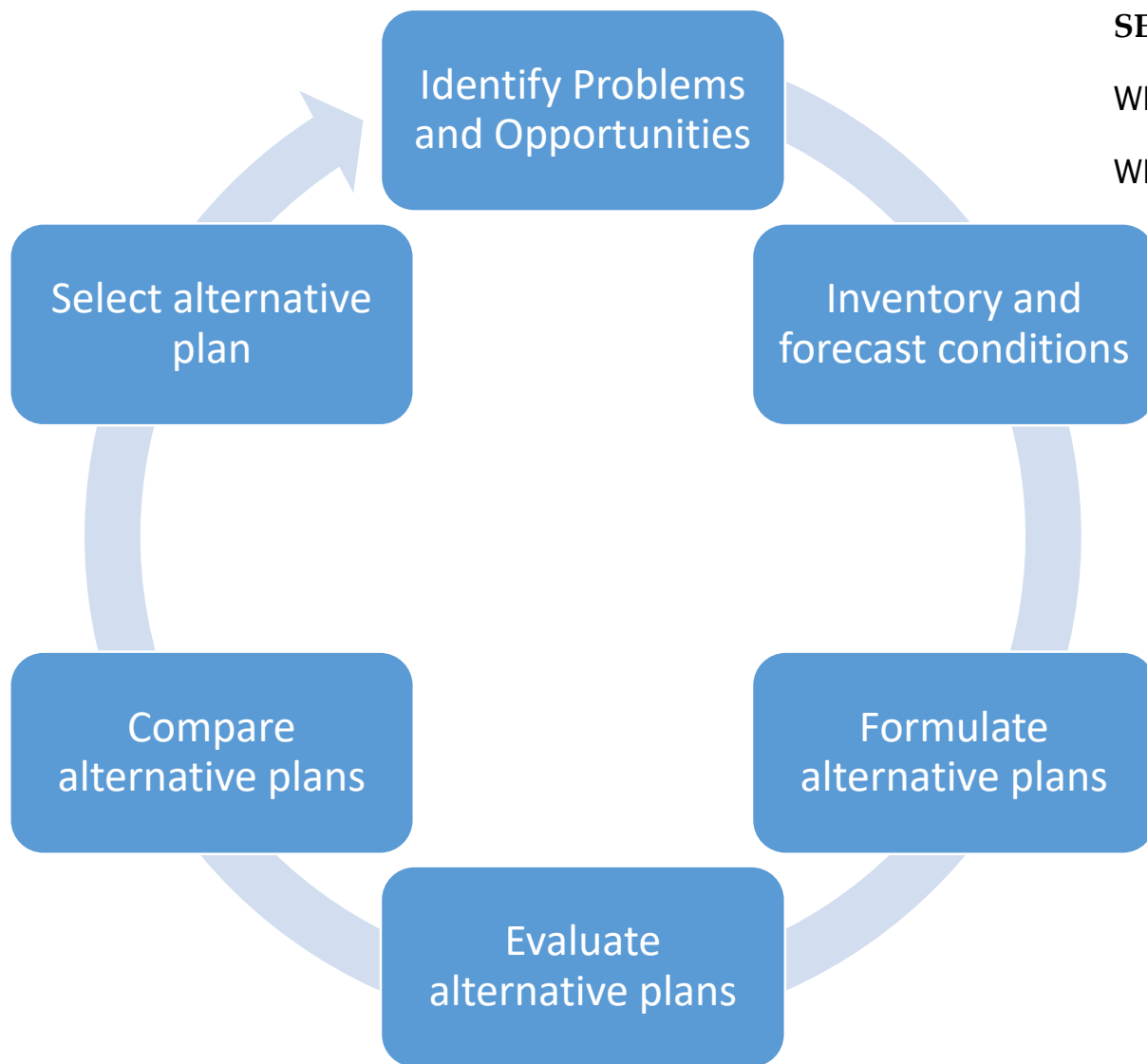
...means **involving stakeholders in the technical analysis** – in the data and technical relationships

Infusing Collaboration into Traditional Planning

SET THE STAGE

Who else is a “partner”?

What levels of involvement?



INFUSE COLLABORATION INTO PLANNING PROCESS

Team (multi-party) decision making

Harmonization with existing plans/projects

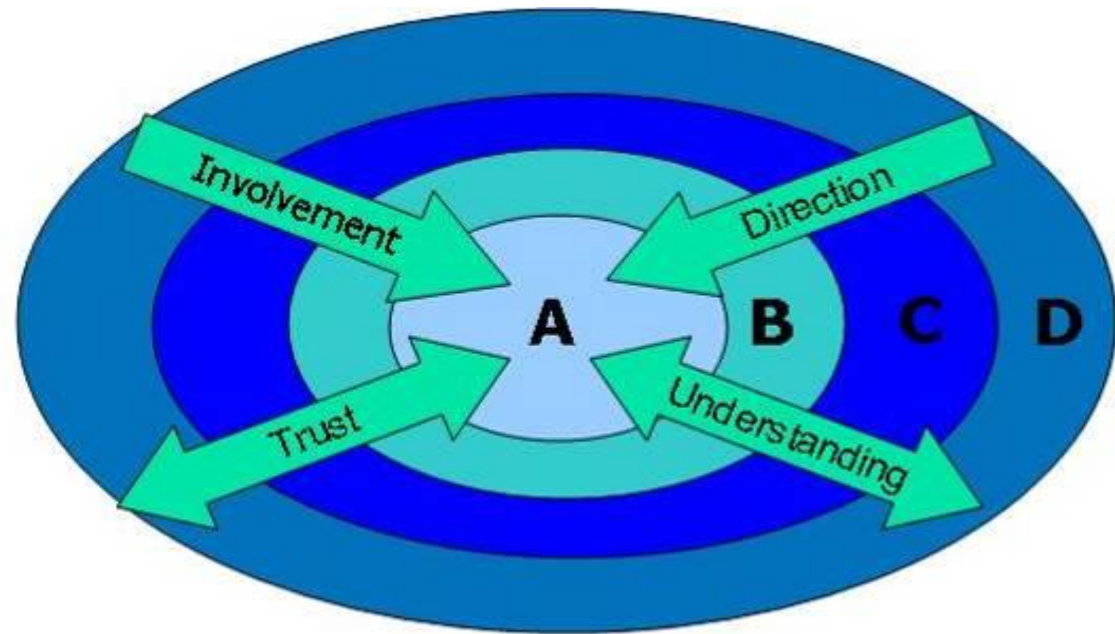
Iterative development and modification of objectives

Joint analysis of technical data

Collaborative evaluation of alternatives

Shared Vision Planning relies on **Structured** Collaboration

- “Circles of Influence” concept relies on team building.
- Concentric circles link representatives with differing levels of personal involvement



**Circle A –
Model
Building team**

**Circle B –
Model Users,
Validators**

**Circle C –
All Interested
Parties**

**Circle D –
Decision
Makers**

Characteristics of SVP Technical Analysis

- **Integrated**
 - all issues are in one place
- **User Friendly**
 - can be used by non-technical parties
- **Understandable/Transparent**
 - assumptions, input, relationships, & output
- **Relevant**
 - to the issues important to stakeholders and decision makers
- **Adaptable/Flexible**
 - to changing conditions or evolving process

Tier I: Conceptual Framework



Tier II: Integrated Planning / Screening /
Negotiating Model



Quality



Hydrology



Ecologic



Economic

Tier III: Detailed Data Sets and Numerical Models

What is different...

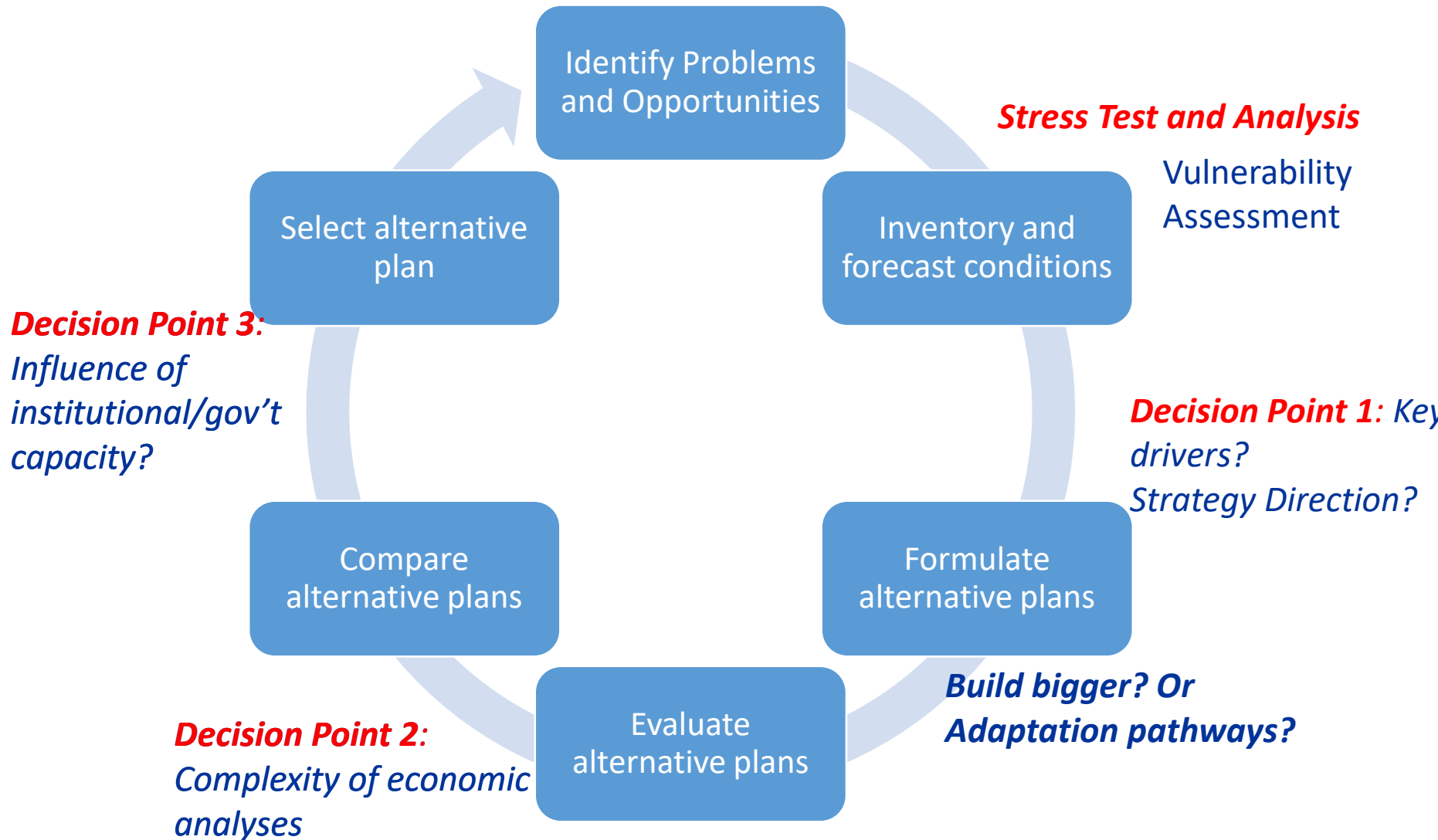
...from other collaborative planning processes?

- **the focus on the technical analysis**

...from traditional technical analysis?

- **the participation of stakeholders in developing and validating the analysis**

Where does this fit into the planning cycle? How does it influence decision making?



What is different when you look at uncertainty?

System Drivers

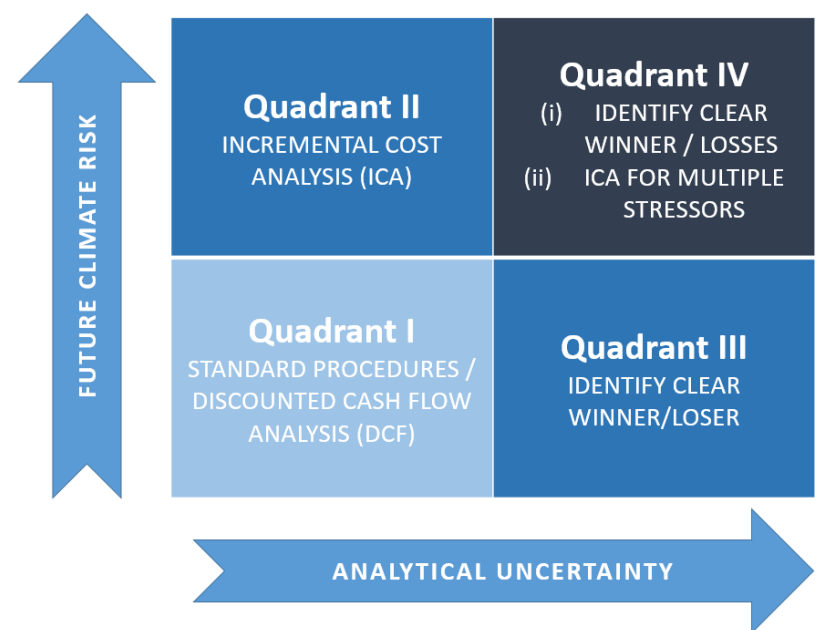
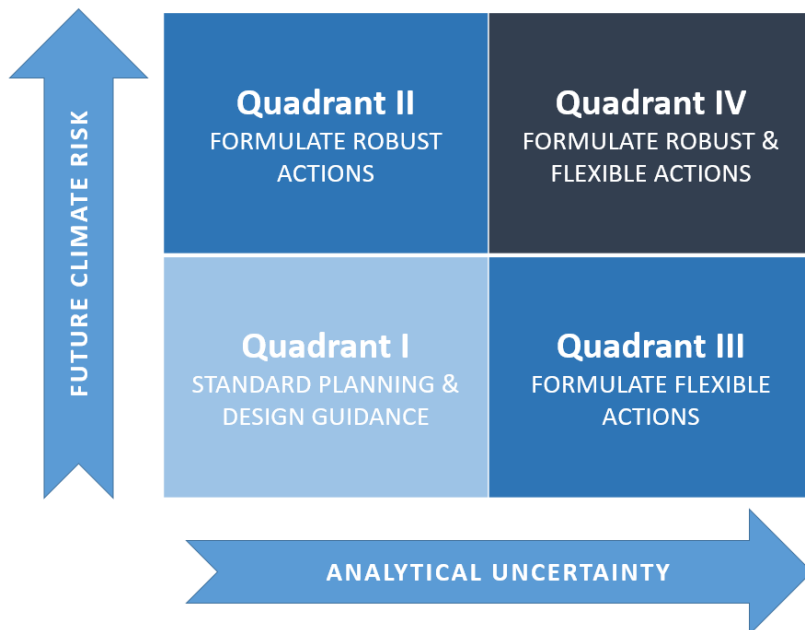
Considered climate change at Step I in process

Stress Test & Analysis

Interpretation of stress test to assess plausibility and uncertainty

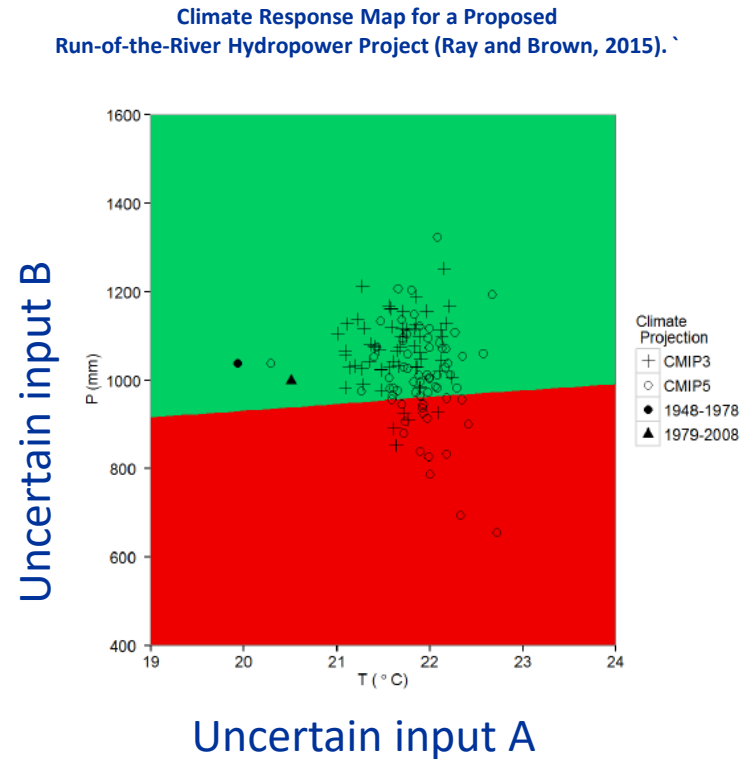
Decision Matrix

*Strategy direction
 *Economic analysis method



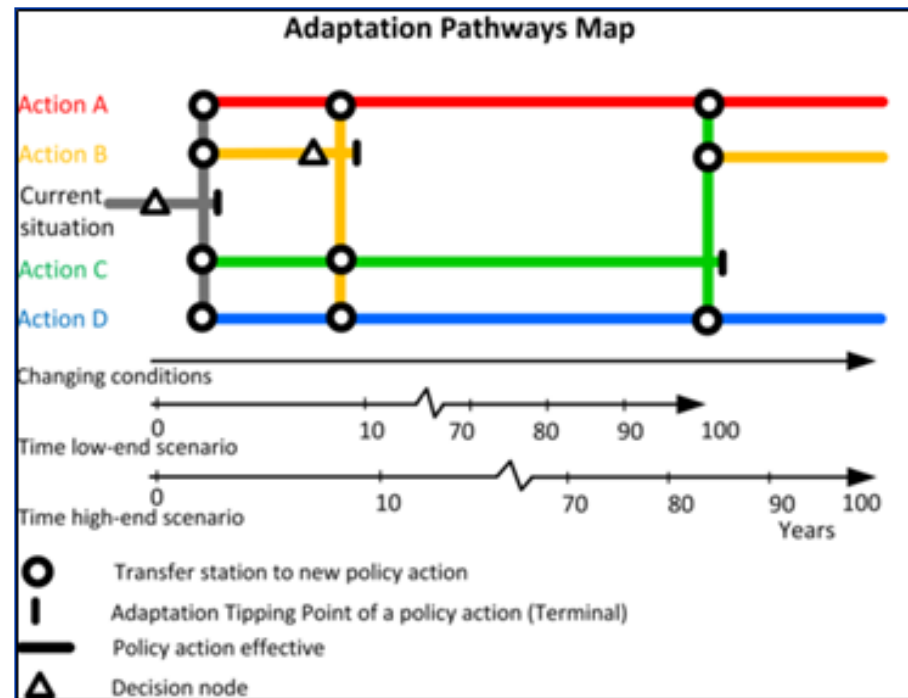
The Stress Test

- Available climate data doesn't always meet the problem at hand: time-scale differs, models perform poorly in geographic region, observed data not available for downscaling
- Limiting analysis to GCM derived scenarios confines your decision space
- Allow stakeholders to define system failure



Adaptation Pathways

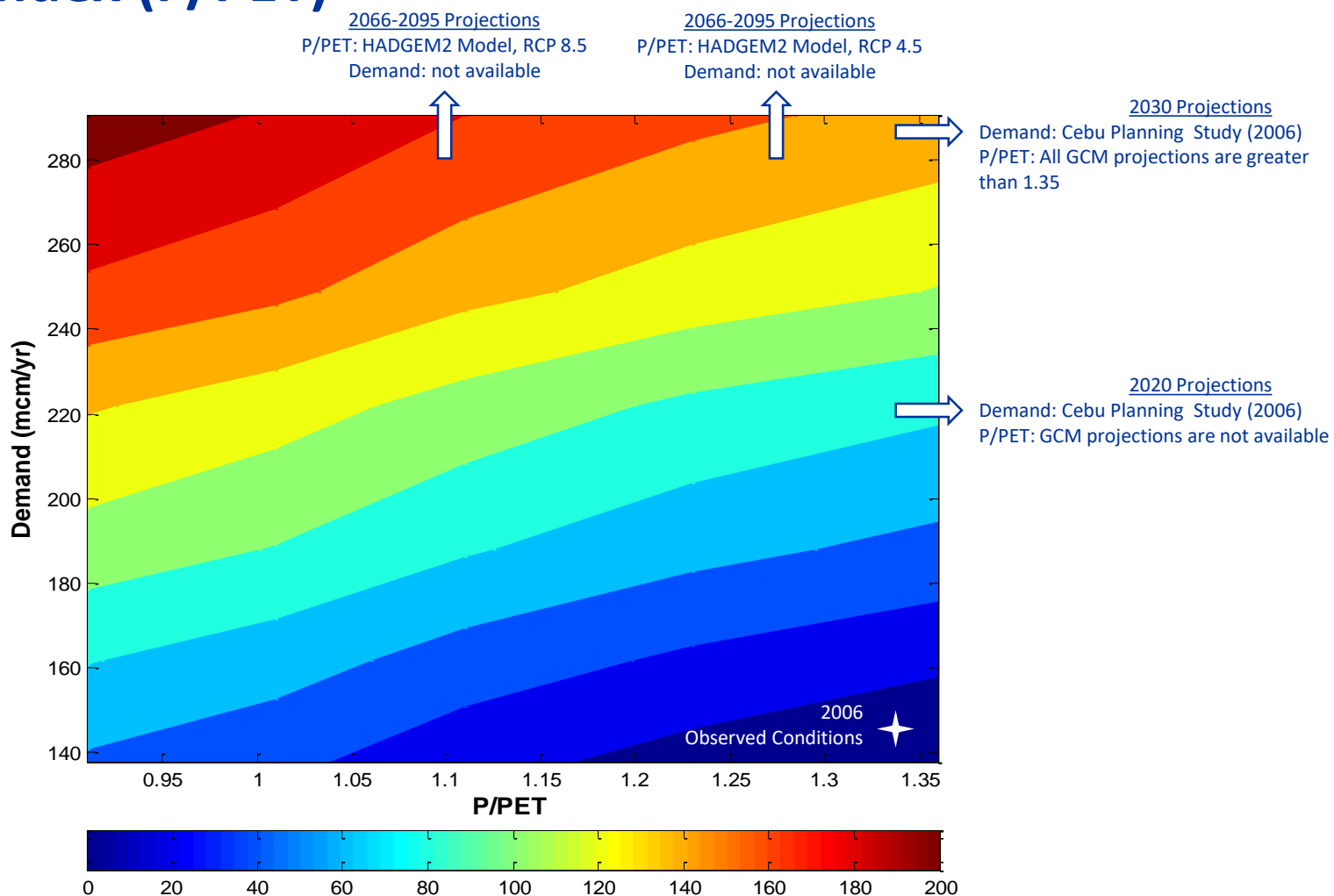
- With limited information, decision makers risk over- or under-designing solutions
- Adaptation pathways illustrate flexible strategies to the decision maker
- Choosing an action that has many transfer points in the future provides a low regret option as the science progresses





CASE STUDY I: WATER RESOURCES MANAGEMENT ACTION PLAN FOR CENTRAL CEBU

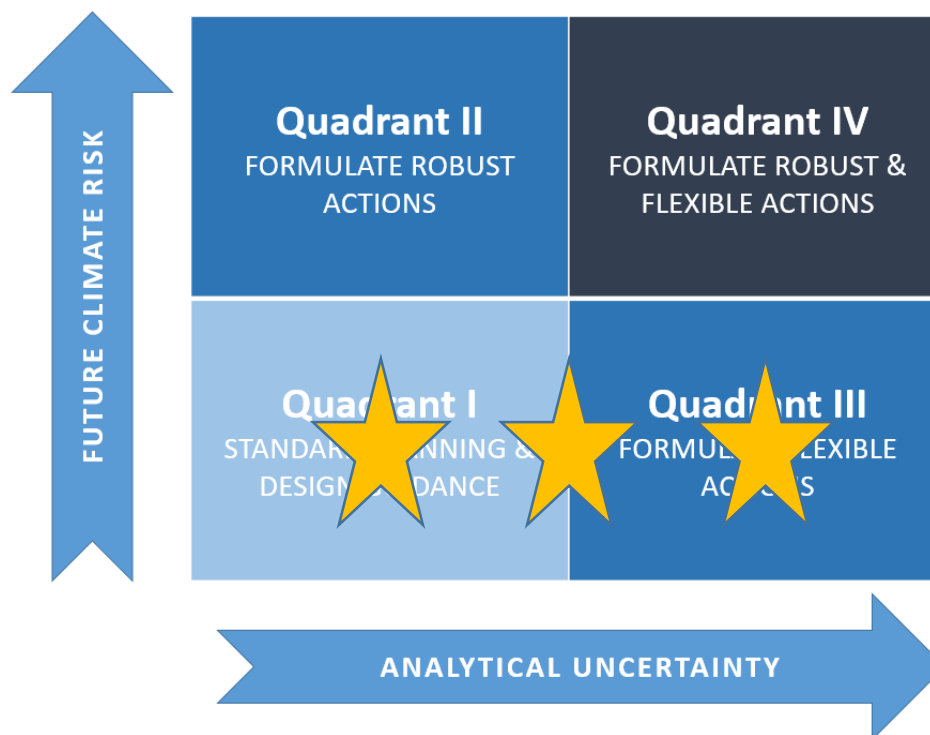
Stress Test of Existing System: Aridity Index (P/PET)



Interpretation of Level of Concern Analysis:

Is there any justification to deviate from Quadrant I?

Driver	Uncertain Future Risk	Analytical Uncertainty
P/PET	Low	Med



Adaptation Pathways for Cebu City

(NPV for current climate state)

Economically Beneficial

Phase I

GW Wells within MCWD
 Lusaran Dam
 Mananga Dam

Phase II

GW Wells outside MCWD
 Kotkot Weir

Current Situation

More Climate Robust

Phase I

Desalinization (small)
 Lusaran Dam
 Kotkot Weir

Phase II

Desalination (medium)
 Southern Wells
 Luyang Dam
 Mananga Dam

IWRM

Phase I

Manange Dam
 GW Wells Outside MCWD
 GW Wells Inside MCWD

Phase II

Desalinization (med-large)
 Lusaran Dam

Demand (mcm/yr)

0

80

160

240

320

400

