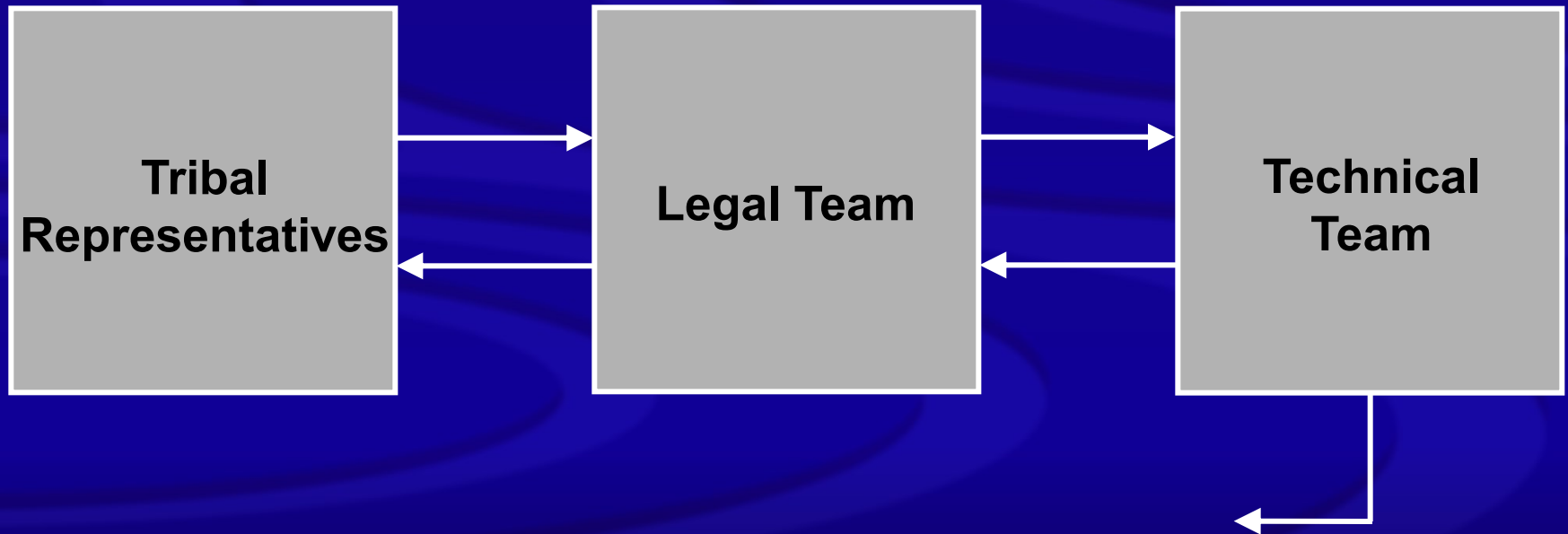


The background of the slide is a solid dark blue color. Overlaid on this background are several concentric, light blue circles that are centered in the middle of the slide. These circles create a ripple effect, with the circles getting progressively lighter and more transparent as they move outwards from the center.

# **Technical Aspects of Developing a Tribal Water Right Claim**

## SETTLEMENT TEAM



## Level of Study

There are three general levels of technical analysis

- Reconnaissance

- Appraisal

- Feasibility

**Increased  
Detail**

**Increased  
Cost**

**Likely  
Reduced  
Claim**

- Tribal Claim  
Quantification

- Settlement/  
Litigation

- Litigation

# Levels of Technical Analysis

## Reconnaissance → Water Rights Assessment

- Utilize easily obtainable information
- Limited or no field work or analysis
- Cannot be used in negotiations

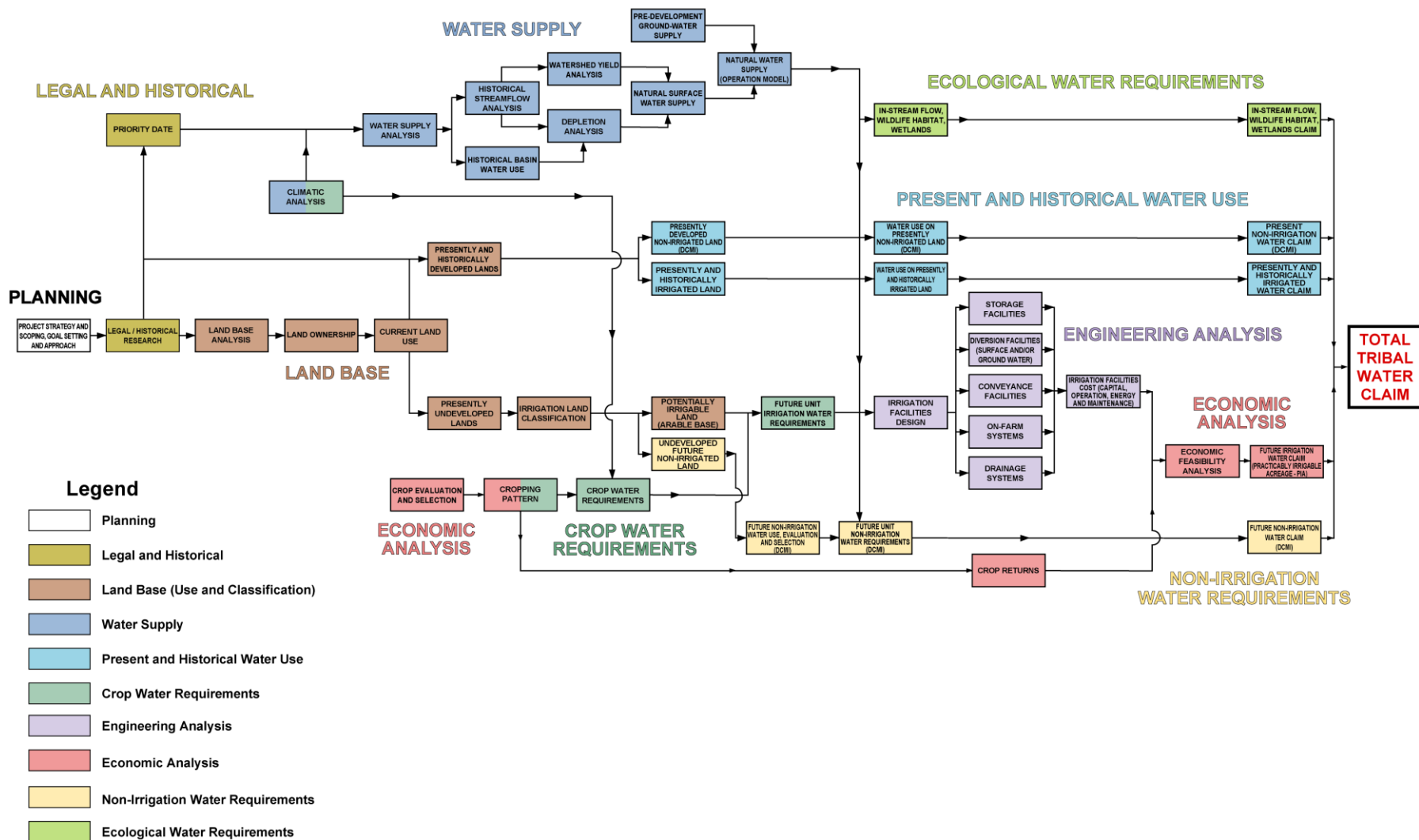
## Appraisal → Negotiation Level

- Varying levels of detail and analysis
- Gives a good idea of claim amount
- Defendable in Negotiations

## Feasibility → Litigation Level

- Specialists performing detailed analysis
- Sophisticated state administrative process
- Defensible in Court

# GENERAL STRUCTURE OF A TRIBAL WATER RIGHT STUDY

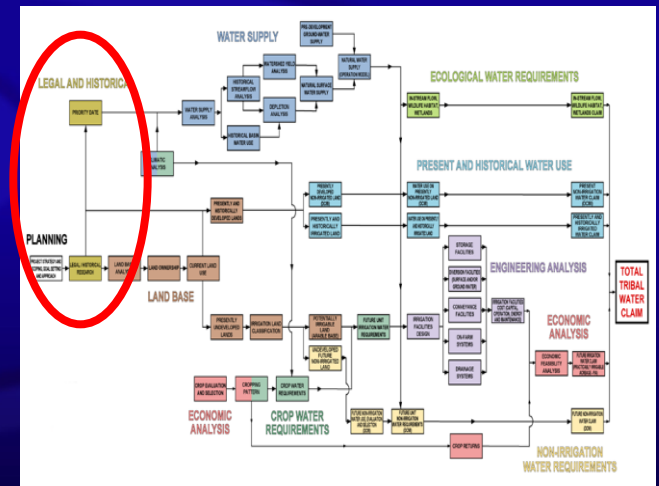


# PLANNING

- Project strategy and scoping, goal setting and approach

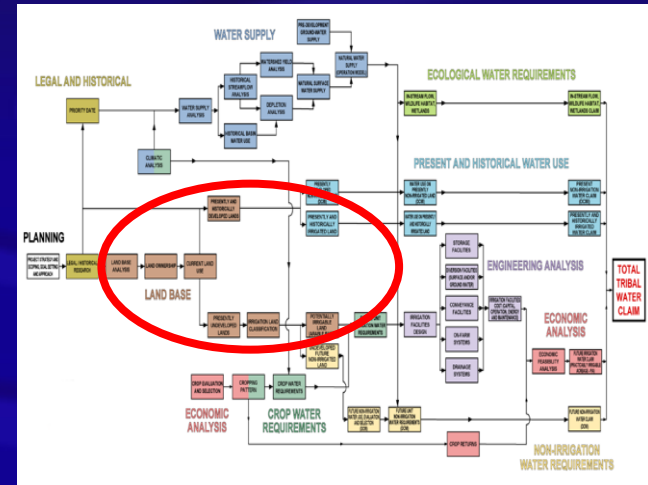
## LEGAL AND HISTORICAL

- Legal / historical research
- Priority date



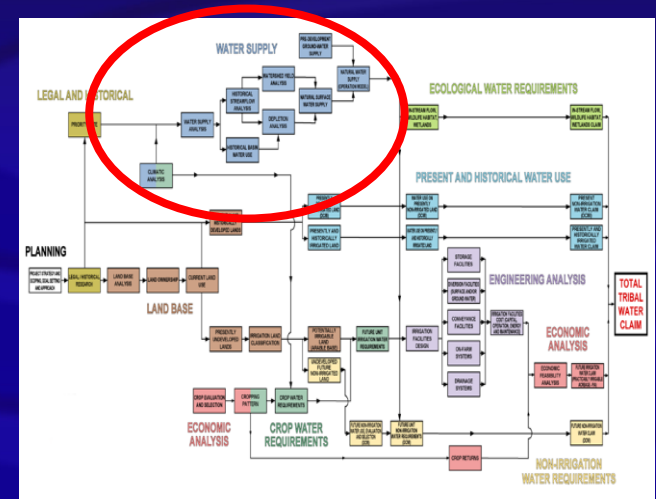
# LAND BASE (USE AND CLASSIFICATION)

- Land ownership
- Presently and historically Developed lands
- Presently undeveloped lands
- Irrigated land classification (soil survey)
- Potentially irrigable land (arable land base)



# WATER SUPPLY STUDIES

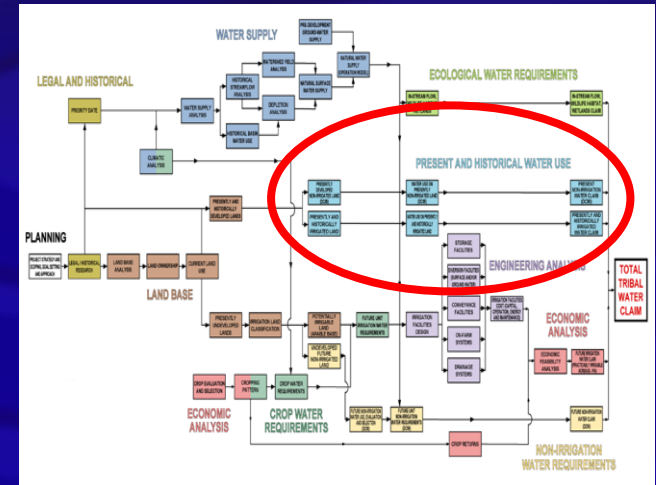
- Climatic analysis
- Watershed yield analysis
- Historical basin water use
- Depletion analysis
- Natural surface water supply
- Pre-development groundwater supply
- Natural water supply operation model





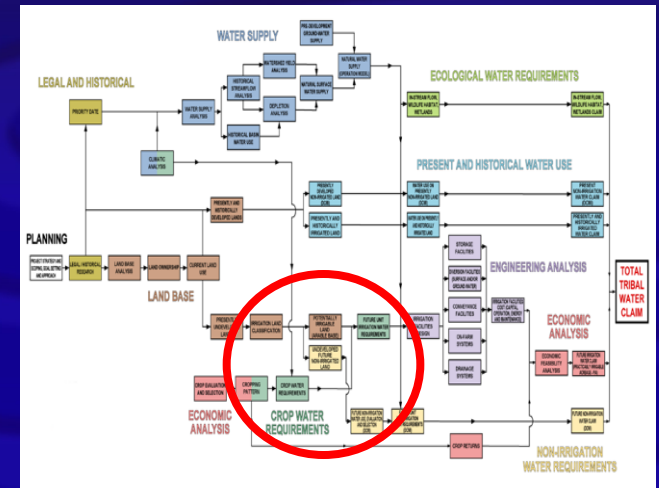
# PRESENT AND HISTORICAL WATER USE

- Presently developed non-irrigated land (DCMI)
- Presently and historically irrigated land
- Water use on presently non-irrigated land (DCMI)
- Water use on presently and historically irrigated land



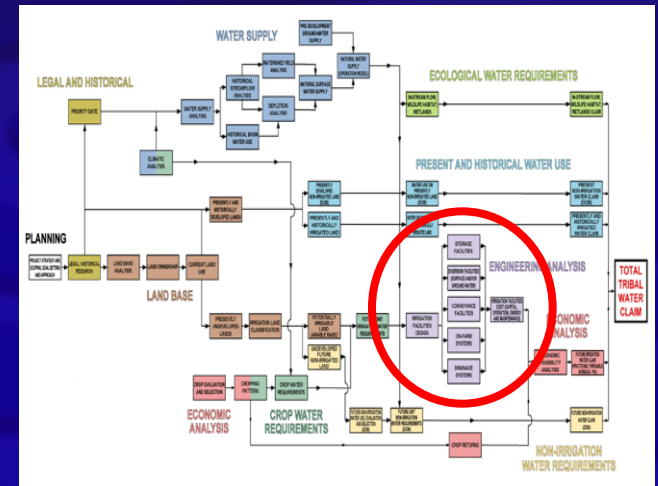
# CROP WATER REQUIREMENTS

- Climate analysis
- Cropping pattern
- Crop water requirements
- Future unit irrigation water requirements



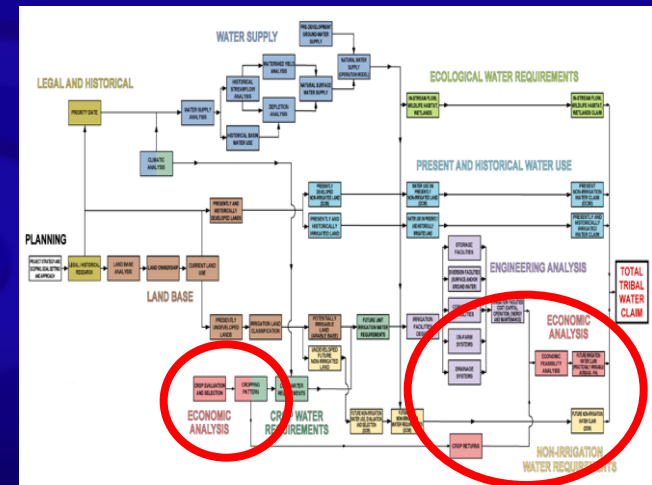
# ENGINEERING ANALYSIS

- Irrigation facility design
- Storage facilities
- Diversion facilities  
(surface water and/or groundwater)
- Conveyance facilities
- On-farm systems
- Drainage systems
- Irrigation facilities cost  
(capital, operation, energy and maintenance)



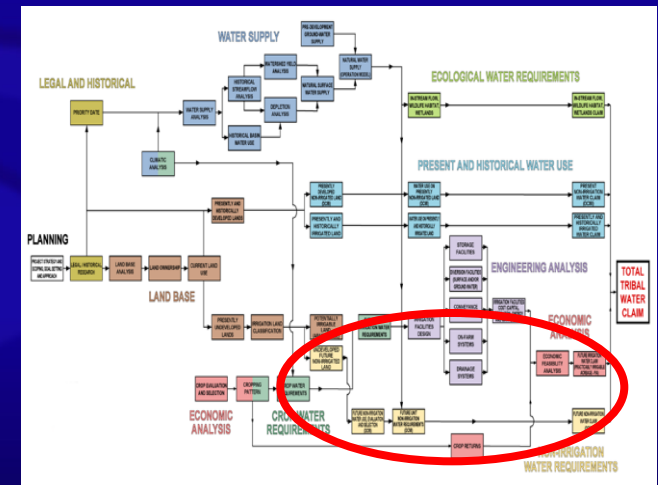
# ECONOMIC ANALYSIS

- Crop evaluation, selection and cropping pattern
- Crop returns
- Economic feasibility analysis



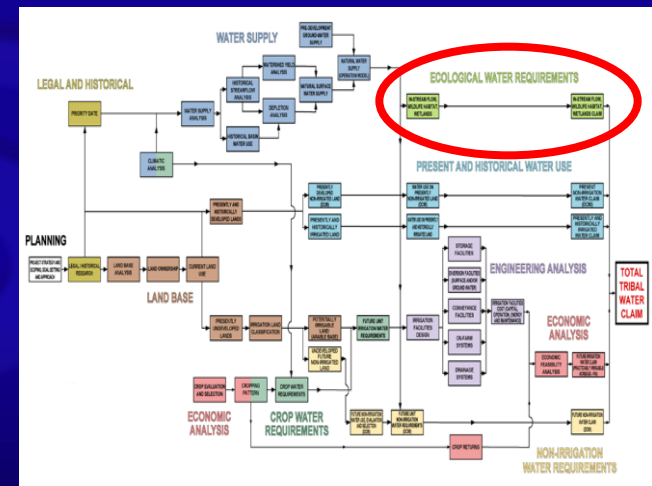
# NON-IRRIGATION WATER REQUIREMENTS

- Undeveloped future non-irrigated land
- Future unit non-irrigation water requirement (DCMI)
- Future non-irrigation water use, evaluation and selection (DCMI)



# ECOLOGICAL WATER REQUIREMENTS

- In-stream flow  
(wildlife habitat, wetlands etc.)



## **TOTAL TRIBAL WATER CLAIMS**

- Presently non-irrigation water claim (DCMI)
- Future non-irrigation water claim (DCMI)
- Presently and historically irrigated water claim
- Future irrigation water claim  
(Practicably Irrigable Acreage – PIA)
- In-stream flow, wildlife habitat, wetlands, claim

## Final Points

- Each Water Claim and Settlement is unique
- Requires continuous interaction between teams:  
Tribal, Legal, and Technical
- Tribal and Legal Teams –  
Establish scope and approach
- Technical Team –  
Conducts necessary studies
- Sometimes it may be necessary to modify the scope  
and approach due to technical findings