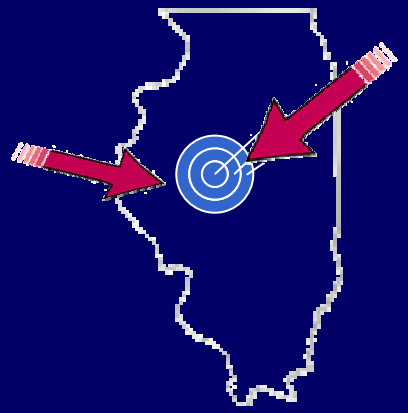
# Strategic Subwatershed Identification Process



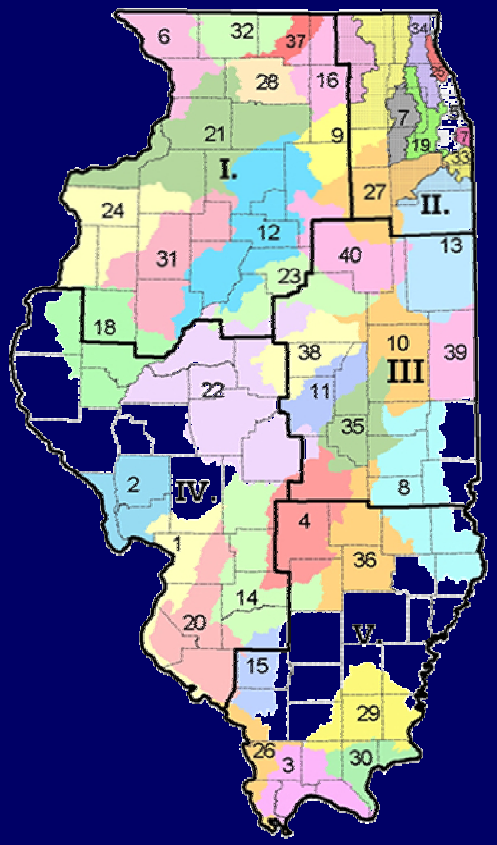
Illinois Department of Natural Resources

**Conservation 2000**

**Ecosystems Program**

# GOAL:

***To provide guidance to Ecosystem Partnerships for Watershed Protection and Restoration Efforts***



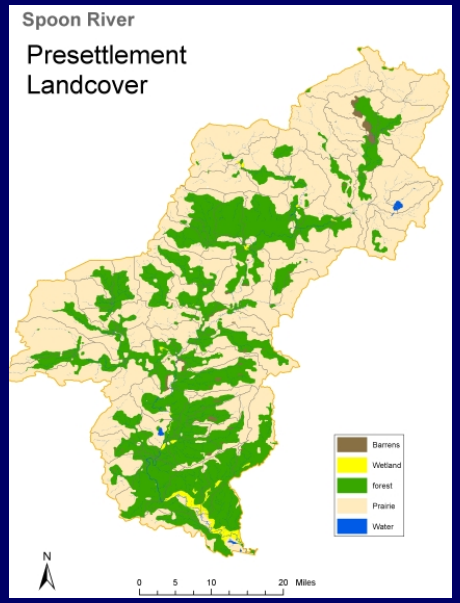

*Maximizing Benefits of Ecosystem Management*

## *Rapidly assess and identify strategic sub-watersheds*

- **In order to:**
- More effectively use resources
- Easily recognize success
- Program sustainability

# INTERACTIVE & DYNAMIC PROCESS

**Natural Resource Data**




**Partnership Involvement**

# Strategic Sub-Watershed Identification PROCESS

# Habitat Quality Index


Biologically significant stream miles

% of sub-watershed that is wetland

% of sub-watershed that is forest

Forest & wetland hubs ( 250/25 acres)

Illinois Natural Areas Inventory (acres)

% of sub-watershed publicly-owned land

Number of Threatened & Endangered sites

100-year floodplain acres

Potential wetland restoration (hydric soils)

# Table 2: Scoring for Habitat Quality Index, Monitoring Sites and Conservation Activity

| | Habitat Quality Index | | | | | | | | | Monitoring Site | | Conservation | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sub | % Forest | | % Wetland | | % Public | | | | | Ecowat | USGS & | C2000 | |
| | % Forest | Hubs | Wetlar | Hubs | % INAI | Land | # of T&E | % Hy | % Floc | CTAP S | IEPA Site | Projects | **Total Points** |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 4 | 1 | 0 | 0 | 12 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 9 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 3 | 0 | 4 | 4 | 0 | 0 | 0 | 13 |
| 7.13E+10 | 2 | 0 | 1 | 0 | 1 | 3 | 3 | 4 | 4 | 0 | 1 | 0 | 19 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 4 | 0 | 0 | 0 | 11 |
| 7.13E+10 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 1 | 0 | 11 |
| 7.13E+10 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 9 |
| 7.13E+10 | 2 | 1 | 4 | 0 | 0 | 2 | 2 | 3 | 3 | 0 | 1 | 0 | 18 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 8 |
| 7.13E+10 | 2 | 0 | 2 | 0 | 0 | 3 | 2 | 4 | 2 | 1 | 0 | 0 | 16 |
| 7.13E+10 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 4 | 3 | 0 | 1 | 0 | 12 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 4 | 2 | 0 | 0 | 0 | 10 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 1 | 0 | 10 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 4 | 2 | 1 | 0 | 12 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 7 |
| 7.13E+10 | 1 | 0 | 2 | 0 | 0 | 4 | 2 | 3 | 1 | 0 | 1 | 0 | 14 |
| 7.13E+10 | 2 | 1 | 3 | 1 | 0 | 1 | 2 | 3 | 3 | 0 | 1 | 0 | 17 |
| 7.13E+10 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 10 |
| 7.13E+10 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 1 | 0 | 11 |
| 7.13E+10 | 3 | 1 | 3 | 2 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 14 |
| 7.13E+10 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 11 |
| 7.13E+10 | 4 | 4 | 4 | 4 | 0 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 21 |
| 7.13E+10 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 11 |
| 7.13E+10 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 4 | 4 | 0 | 1 | 0 | 12 |
| 7.13E+10 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 12 |
| 7.13E+10 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 0 | 0 | 13 |
| 7.13E+10 | 4 | 4 | 4 | 1 | 0 | 4 | 0 | 1 | 3 | 0 | 1 | 0 | 22 |
| 7.13E+10 | 4 | 3 | 3 | 2 | 0 | 0 | 2 | 4 | 4 | 0 | 1 | 0 | 23 |
| 7.13E+10 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 11 |

# Monitoring Sites

# of USGS stations
# of water quality monitoring stations (state)
# of CTAP/EcoWatch

# Conservation Activities

# of C2000 projects
# of other DNR projects
# of CREP projects
# of other projects (federal, local, etc.)

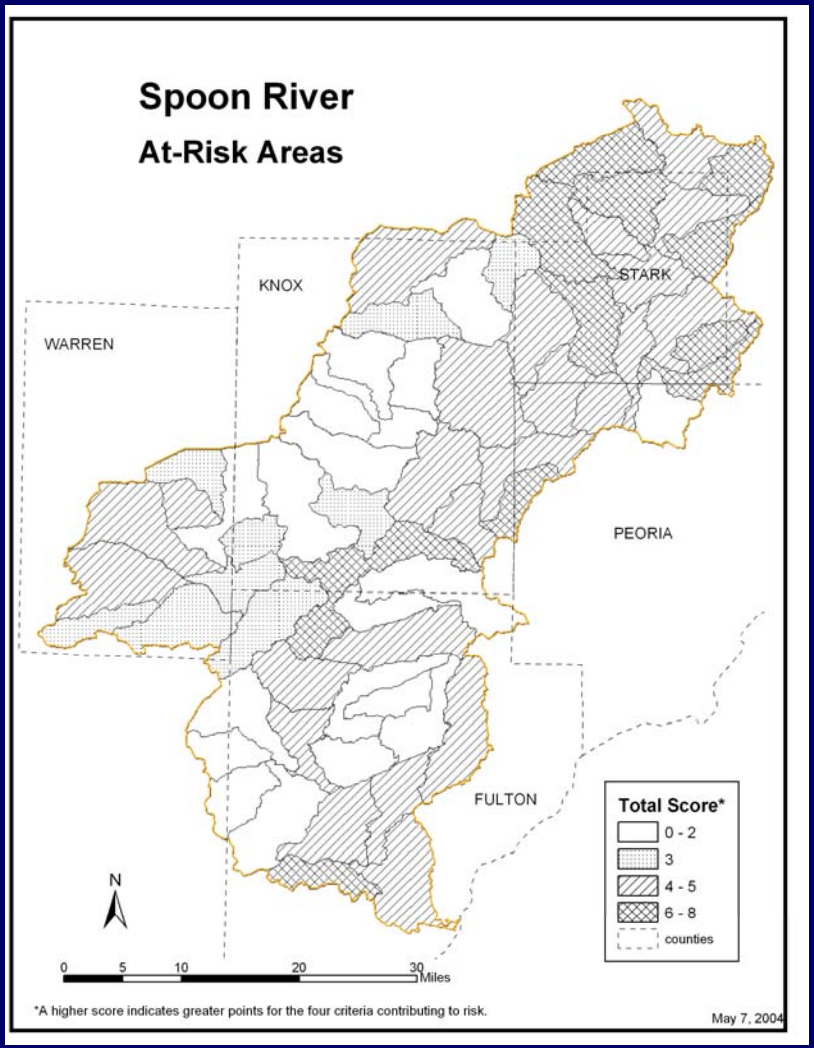
# At-Risk Index

% Urban Area

% of land in row-crop

Feet of channelized streams

IEPA 303(d) listed streams



# Other Considerations

Landowner willingness

Planning activities at Sub-watershed level

Location within the Partnership

Future Threats

Other Information from Partnership?

# Potential Funding Opportunities

FSA Farm Service Agency *Online*

Illinois Department of Agriculture

US Army Corps of Engineers ®

NRCS Natural Resources Conservation Service

U.S. Fish & Wildlife Service

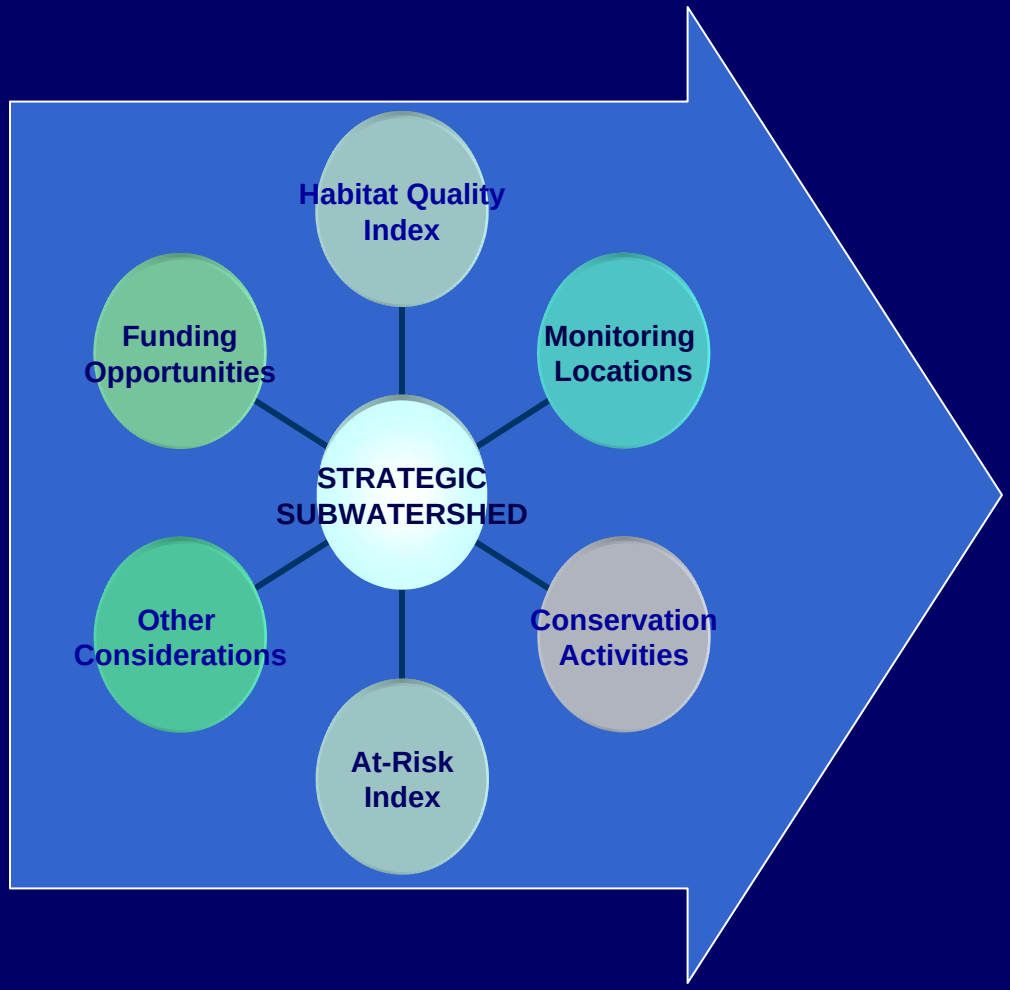
Illinois Environmental Protection Agency

United States Environmental Protection Agency

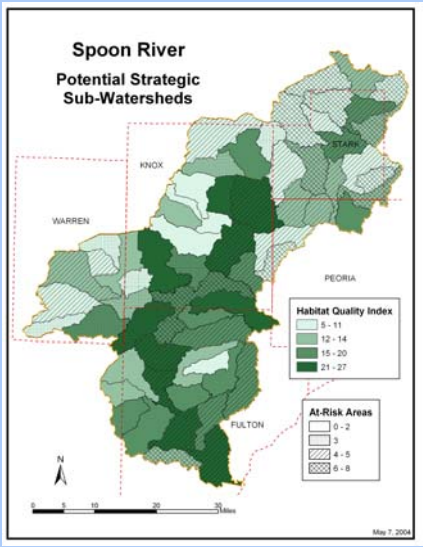
Illinois dceo Department of Commerce and Economic Opportunity

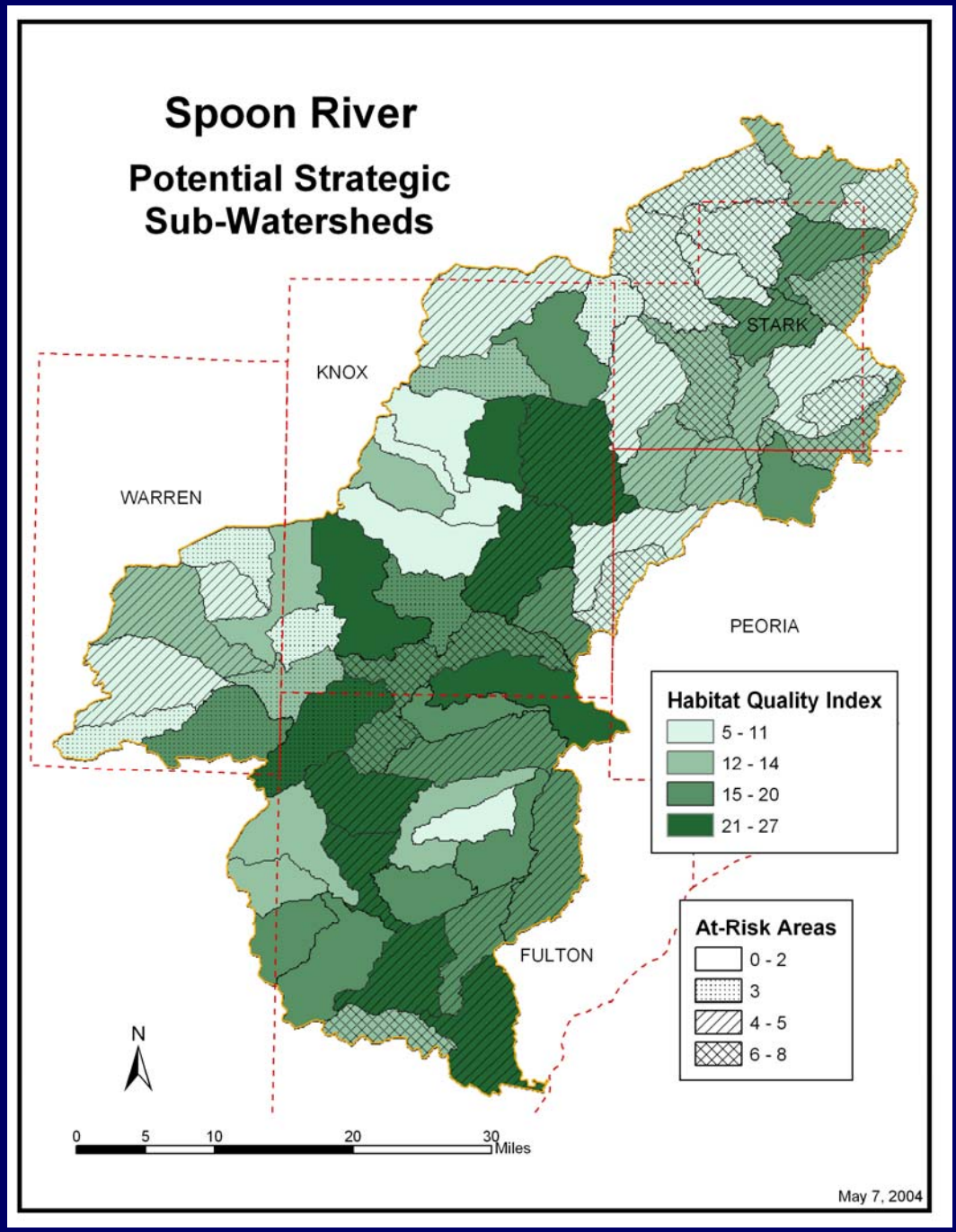
USDA

# Strategic Sub-Watershed Process




6 or 7 Strategic Sub-Watersheds Identified




Spoon River
Potential Strategic Sub-Watersheds
STARK
KNOX
WARREN
PEORIA
FULTON
Habitat Quality Index
5 - 11
12 - 14
15 - 20
21 - 27
At-Risk Areas
0 - 2
3
4 - 5
6 - 8
N
0 5 10 20 30 Miles
May 7, 2004

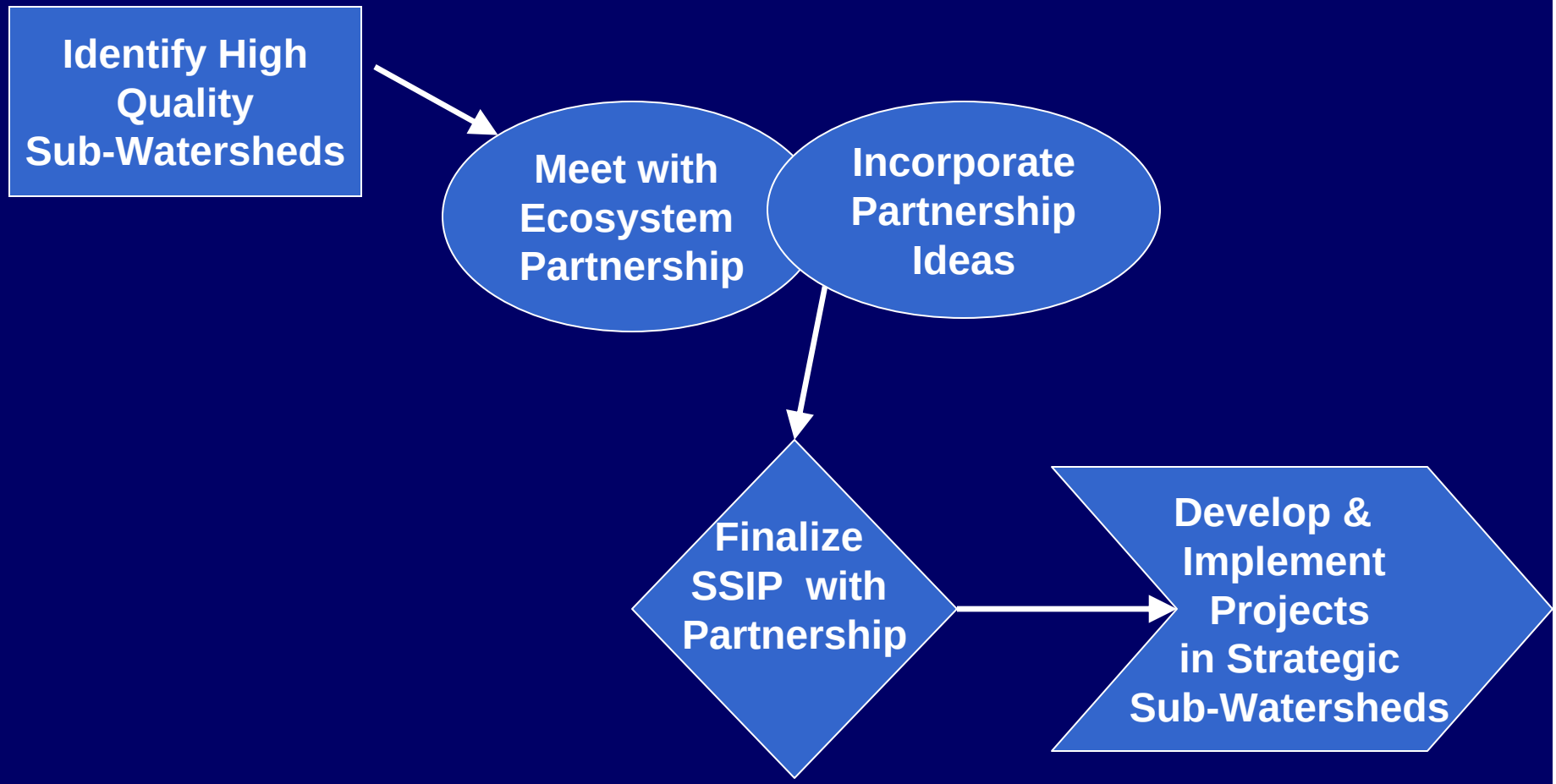
# How to Use SSIP

## Focus future projects in strategic sub-watersheds

- *Use in prioritizing projects*
- *Use as a marketing tool to influence landowners/local organizations/government officials located in strategic sub-watersheds to submit/support project proposals or other conservation activity*
- *Incorporate in other agency planning processes*

## Use to leverage other funding sources

# Time Frame for Identifying Strategic Sub-Watersheds



This process should be…

RAPID

SIMPLE

DYNAMIC