



# Conservation Planning

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# Conservation Planning

- **NRCS/SWCD** provides conservation planning and technical assistance to clients (individuals, groups, and units of government).
- **Clients** develop and implement plans to protect, conserve, and enhance natural resources (soil, water, air, plants, and animals) within their social and economic interests.

# Conservation Planning

## A Brief History



# SOIL Conservation Service



## Conservation Planning = “T”

There were no RMS plans; there were no programs;

No computers!

We used pencils and pens, and ordered photos;

No e-mail, no voice mail, and no cell phones —

We had a Pick-up truck and a clipboard.



Goals were:

# of people assisted,

# of acres planned, and

# and practices applied.

So, What  
Happened?

# NEPA Happened in 1969

SCS agreed to change its planning procedures after 14 years.

Changes Included: RMS Level Plans, SWAPA, EE, CPPE, Quality Criteria, and Reporting.

There were many policy changes, but “T” was still the cornerstone of the agency

Utilize a systemic, interdisciplinary approach in planning and decision making

And

Identify and develop methods and procedures in decision making

## In 1985, the Farm Bill Happened

Introduced new terms:  
HEL, SWAMPBUSTER, SODBUSTER, CRP

We now had legislated planning policy.  
Resource conservation tied to USDA assistance.

Targeted erodible land, and wetlands only.  
What happened to SWAPA?

ACS and BCS were new planning criteria and  
the desired results changed.

## Then, Farm Bill 2002 Happened

More new terms and new programs.  
WHIP, GRP, CSP, FPP

And now USLE was RUSLE!

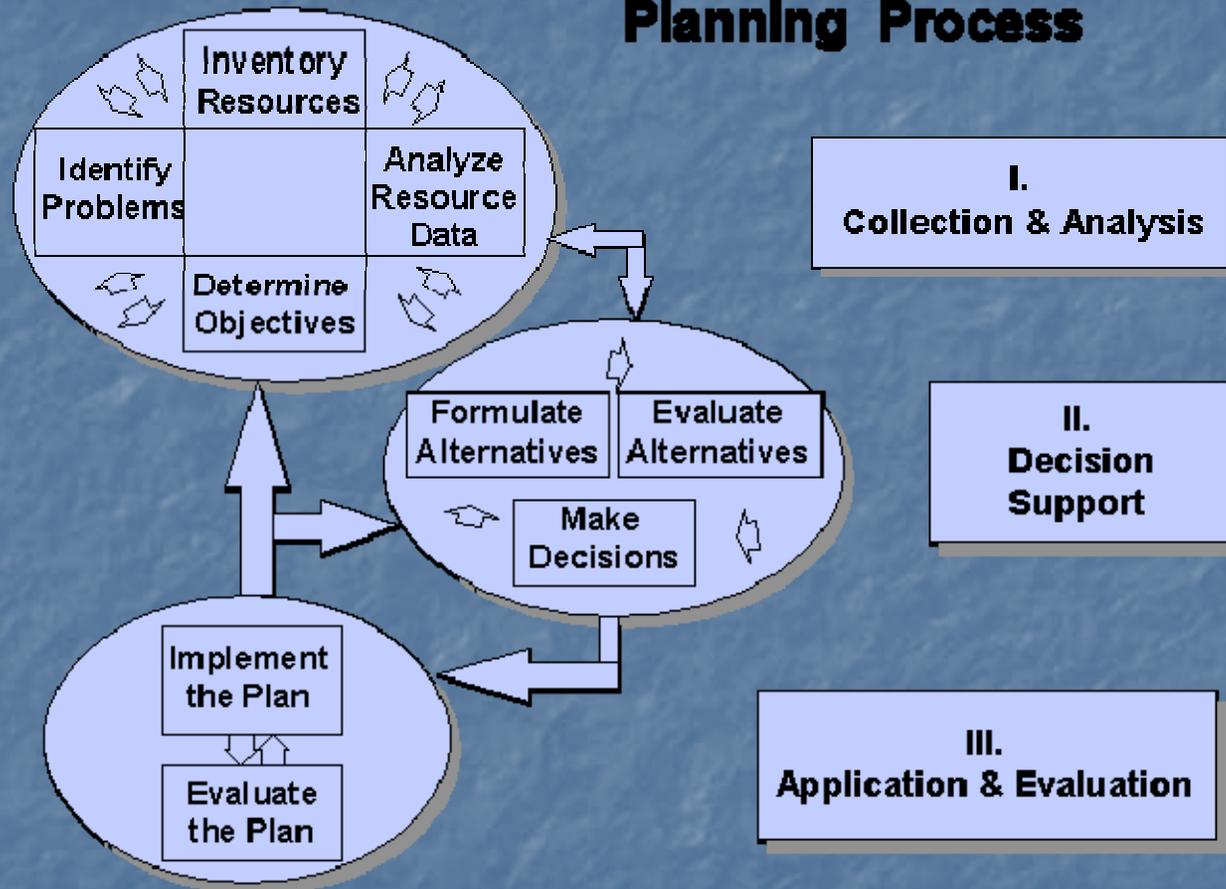


**Farm Bill 2008?**

# Conservation Planning

- Planning is complex and dynamic.
- A fundamental truth:  
To do planning right, real planning, is a complicated, interactive, time-consuming process. Automating our assessment tools, developing planning software, streamlining program rules, developing 4,000 CSGs for every CRA, having eFOTG and digital ortho photography on-line, having TSPs do the work, ...(and the list goes on)... will **NOT** change that fact.

## Planning Process



An illustration of the dynamic nature of the planning process.

# Conservation Planning

- Consider the needs and capabilities of each acre within the plan
- Consider the farmer's facilities, machinery, and economic situation
- Incorporate the farmer's willingness to try new practices
- Consider the land's relationship to the entire farm, ranch, or watershed

# Conservation Planning

- The planning process used by NRCS is based on the premise that clients will make and implement sound decisions if they understand their resources, natural resource problems and opportunities, and the effects of their decisions.

# Conservation Planning

- The success of conservation planning and implementation depends on the voluntary participation of clients.



# Why should a Client ask **YOU** for Planning Assistance?

- Uncertain or Unsure
- Advice
- Knowledge
- Resources

# Certification

Title 180 of the General Manual  
409 Conservation Planning Policy

VA 409.3 Requirements for Providing  
Conservation Planning Assistance

# Planning Standards

The screenshot shows a Microsoft Internet Explorer browser window displaying the Virginia NRCS website. The address bar shows the URL: [http://www.va.nrcs.usda.gov/technical/conservation\\_planning.html](http://www.va.nrcs.usda.gov/technical/conservation_planning.html). The page header includes the NRCS logo and the text "Natural Resources Conservation Service Virginia". A navigation menu contains links for "Virginia Home", "About Us", "News", "Programs", "Technical Resources", "Partnerships", and "Contact Us".

On the left side, there is a search box with "Virginia" selected in a dropdown menu and a "GO" button. Below the search box is a "Technical Resources" section with a list of links: "Draft Standards", "Conservation Planning", "eFOTG", "Engineering", "National Resources Inventory", "RUSLE2", "Soils", "Toolkit", and "Technical Service Provider (TSP) Info". At the bottom of this section is a link to "Find a Service Center".

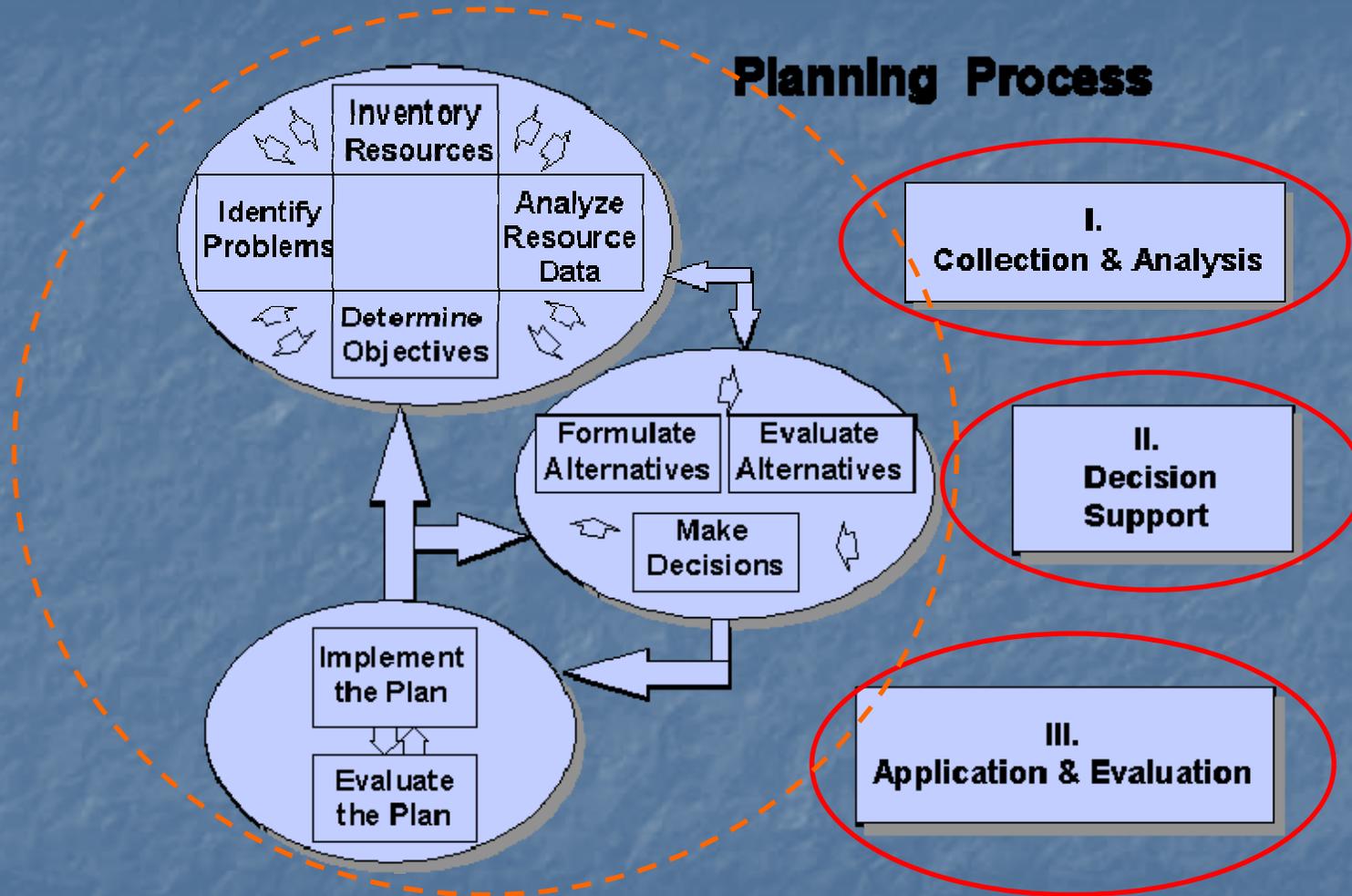
The main content area is titled "Conservation Planning" and contains several links: "National Planning Procedures Handbook", "Virginia Supplements", "Title 180 Part 409 'Conservation Planning Policy' of the General Manual", "Ecological Sciences", "Nutrient Management", "National Handbook of Conservation Practices", "National Employee Development Center for Conservation Planning Courses", "CORE 4 Conservation Practices", "Toolkit", and "DCR Nutrient Management Information".

A table is displayed under the "Virginia Supplements" link. The table has three columns: "Document Title", "View", and "Download".

Document Title	View	Download
PART 600 - NATIONAL PLANNING PROCEDURES HANDBOOK (NPPH)		

The browser's status bar at the bottom shows "Internet".

## Planning Process



An illustration of the dynamic nature of the planning process.

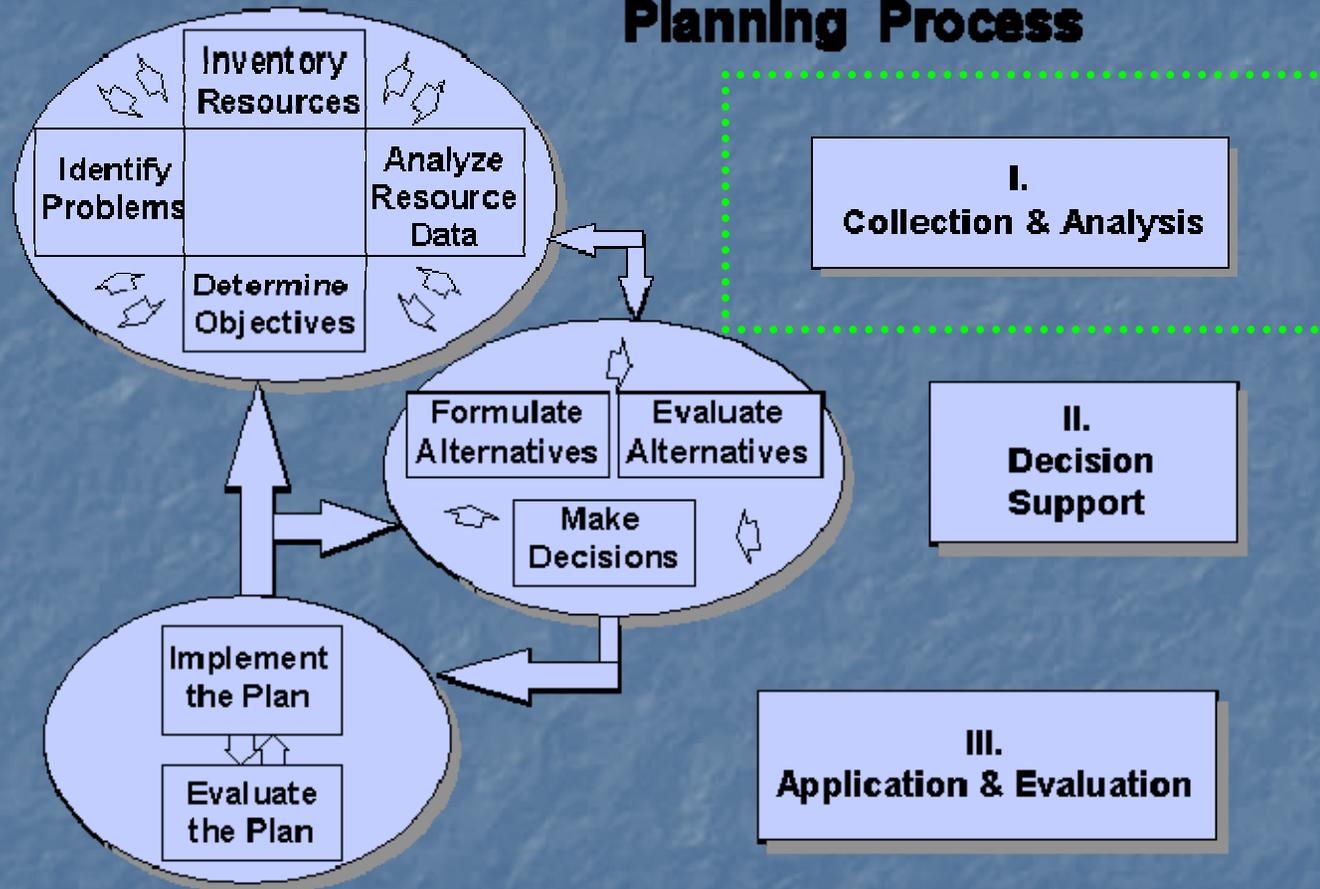
# Conservation Planning

- **Phase I - Collection and Analysis**  
(Understanding the Problems and Opportunities)
- **Phase II - Decision Support**  
(Understanding the Solutions)
- **Phase III - Application and Evaluation** (Understanding the Results)

# NEW & IMPROVED PLANNING STEPS



## Planning Process



An illustration of the dynamic nature of the planning process.

# Phase I - Collection and Analysis

(Understanding the Problems and Opportunities)

- 1. Identify Problems and Opportunities
- 2. Determine Objectives
- 3. Inventory Resources
- 4. Analyze Resource Data

# Step 1 - Identify Problems and Opportunities

- Identify resource problems, opportunities, and concerns in the planning area.

## Step 2 - Determine Objectives

- Identify the client's objectives.

## Step 3 - Inventory Resources

- Inventory the natural resources and their condition, and the economic and social considerations related to the resources. This includes on-site and related off-site conditions.

# Resource Inventory Considerations

- Soil
  - Erosion
  - Condition
  - Deposition
- Water
  - Quantity
  - Quality
- Air
  - Quantity
  - Quality
- Plants
  - Suitability
  - Condition
  - Management
- Animals
  - Habitat
  - Management

## Step 4 - Analyze Resource Data

- Analyze the resource information gathered in planning step three to clearly define the natural resource conditions, along with economic and social issues related to the resources. This includes problems and opportunities.

# SWAPA+H

<b>Resource Concern</b>	<b>Description of Concern</b>	<b>National Quality Criteria</b>	<b>Measurement Units</b>
<b>Soil Erosion – Sheet and Rill</b>	Detachment and transport of soil particles caused by rainfall splash and runoff degrade soil quality.	Sheet and rill erosion does not exceed the Soil Loss Tolerance "T".	Tons/Acre/Year – average annual tons of erosion reduced per acre for the field or planning area/unit
<b>Soil Erosion – Wind</b>	Detachment and transport of soil particles caused by wind degrade soil quality and/or damage plants.	Wind erosion does not exceed the Soil Loss Tolerance "T" or, for plant damage, does not exceed Crop Damage Tolerances.	Tons/Acre/Year – average annual tons of erosion reduced per acre for the field or planning area/unit
<b>Soil Erosion – Ephemeral Gully</b>	Small channels caused by surface water runoff degrade soil quality and tend to increase in size. On cropland, they can be obscured by heavy tillage.	Surface water runoff is controlled sufficiently to stabilize the small channels and prevent reoccurrence of new channels.	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit
<b>Soil Erosion – Classic Gully</b>	Deep, permanent channels caused by the convergence of surface runoff degrade soil quality. They enlarge progressively by head cutting and lateral widening.	Surface water runoff is controlled sufficiently to stop progression of head cutting and widening.	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit
<b>Soil Erosion – Streambank</b>	Accelerated loss of streambank soils restricts land and water use and management.	Accelerated streambank soil loss does not exceed a level commensurate with upstream land use and normal geomorphologic processes on site.	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit
<b>Soil Erosion – Shoreline</b>	Soil is eroded along shorelines by wind and wave action, causing physical damage to vegetation, limiting land use, or creating a safety hazard.	Shoreline erosion is stabilized to a level that does not restrict the use or management of adjacent land, water or structures.	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit
<b>Soil Erosion – Irrigation induced</b>	Improper irrigation water application and equipment operation are causing soil erosion that degrades soil quality.	Irrigation induced erosion does not exceed the Soil Loss Tolerance "T".	Tons/Acre/Year – average annual tons of erosion reduced per acre for the field or planning area/unit
<b>Soil Erosion – Mass Movement</b>	Soil slippage, landslides, or slope failures, normally on hillsides, result in large volumes of soil and rock movement.	Shallow slumps, slides, or slips are prevented or minimized so that the mass movement of earth material does not exceed naturally occurring rates.	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit
<b>Soil Erosion – Road, Roadsides and Construction Sites</b>	Soil loss occurs on areas left unprotected during or after road building and/or construction activities.	Sites are adequately protected from soil loss during and after road building and construction activities.	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit



Information

Search menu:  GO!

eFOTG FYI

- [-] eFOTG
  - [-] Section I
  - [-] Section II
  - [-] Section III
    - [-] Table of Contents
    - [-] A. Conservation System Guides
    - [-] B. Resource Quality Criteria for RMS
      - [-] 1. Soil
      - [-] 2. Water
      - [-] 3. Air
      - [-] 4. Plant
      - [-] 5. Animal
    - [-] C. Resource Quality Criteria Legislated Programs
    - [-] D. Guidance Documents
  - [-] Section IV
  - [-] Section V

eFOTG Home Page

What is eFOTG?

Technical guides are the primary scientific references for NRCS. They contain technical information about the conservation of soil, water, air, and related plant and animal resources.

[...more](#)

For additional information and requirements please contact your local [USDA Service Center](#).

What's in eFOTG?

- Section I -General References
- Section II -Natural Resources Information
- Section III-Conservation Management Systems
- Section IV -Practice Standards and Specifications
- Section V -Conservation Effects

[...more](#)

In The Spotlight

What's Changed Recently



- [Major Changes to the Standard 578 \(3/14/2008\)](#)
- [Design Note 578 \(3/14/2008\)](#)
- [Major Changes to Standard \(3/14/2008\)](#)
- [Design Note 574 \(3/14/2008\)](#)
- [Major Changes to the 561 Standard \(3/14/2008\)](#)
- [Design Note 561 Heavy Use Area Protection \(3/14/2008\)](#)
- [Design Note \(3/14/2008\)](#)
- [Major Changes to the Standard \(3/14/2008\)](#)
- [Major Changes to the Standard \(3/14/2008\)](#)
- [Engineering Design Note - Road Drainage \(3/14/2008\)](#)
- [Stream Crossing 578 Operations & Maintenance \(3/12/2008\)](#)
- [Stream Crossing \(No\) \(578\) Standard \(3/12/2008\)](#)
- [Animal Trails and Walkways \(Ac\) \(575\) Operations & Maintenance \(3/12/2008\)](#)
- [Animal Trails and Walkways \(AC\) \(575\) Standard \(3/12/2008\)](#)

# Results of Step 1?

- Planning the entire unit or part of the unit

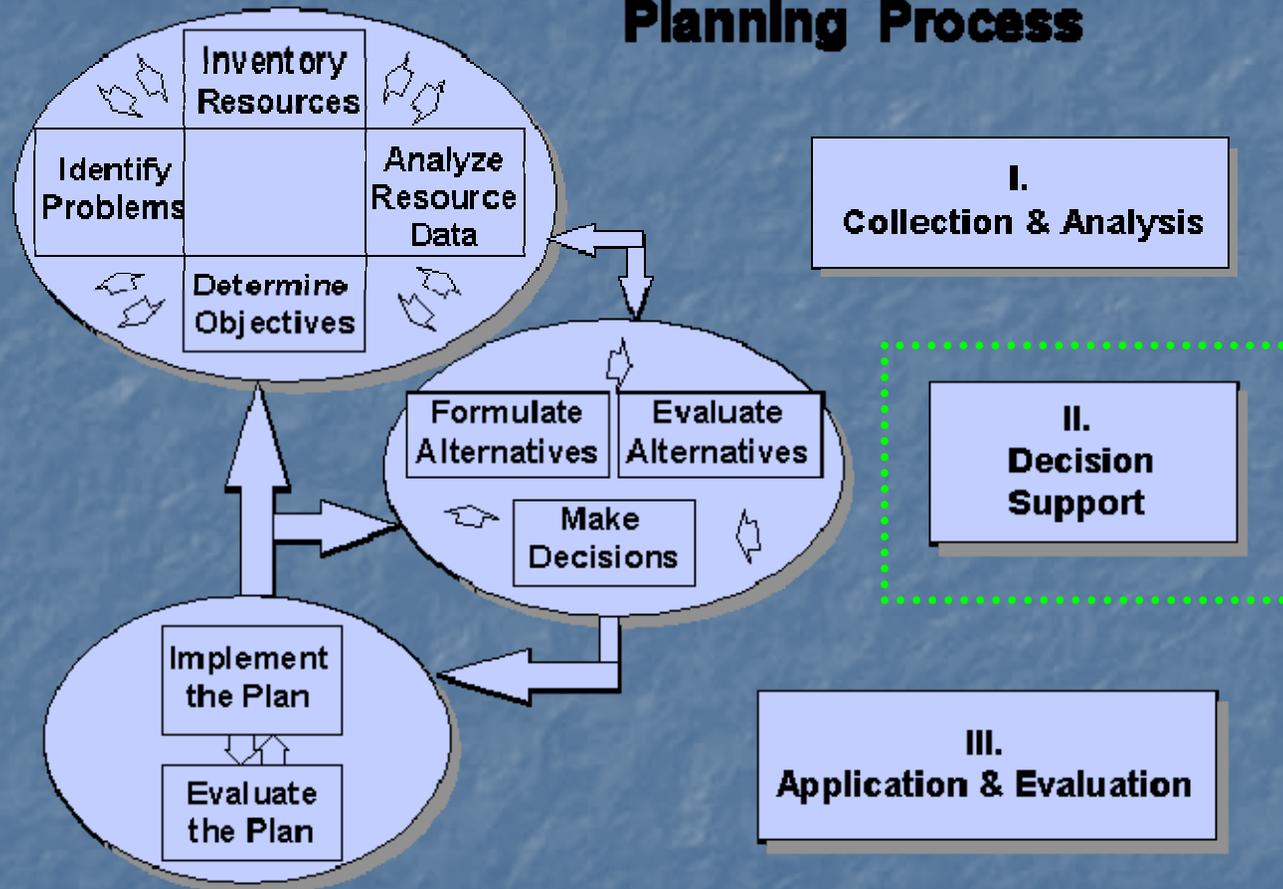
PLU

CLU

CMU

- Planning to an RMS level or progressive

## Planning Process



An illustration of the dynamic nature of the planning process.

# Phase II - Decision Support (Understanding the Solutions)

- 5. Formulate Alternatives
- 6. Evaluate Alternatives
- 7. Make Decisions

# Step 5 - Formulate Alternatives

- Formulate alternatives that will achieve the client's objectives, solve natural resource problems, and take advantage of opportunities to improve or protect resource conditions.

# Step 6 - Evaluate Alternatives

- Evaluate the alternatives to determine their effects in addressing the client's objectives and the natural resource problems and opportunities. Evaluate the projected effects on social, economic, and ecological concerns. Special attention must be given to those ecological values protected by law or Executive Order.

“If the only tool you have is a hammer, every problem is a nail.”



# \$ Show me the Money \$

- Identify potential sources of financial assistance and the requirements for participation
- Economics generally play a substantial role in decision making
- **DO NOT** let programs drive or overshadow the planning process

# Step 7 - Make Decisions

- The client selects the alternative(s) and works with the planner to schedule conservation system and practice implementation. The planner prepares the necessary documentation.



# Nobody needs a cap!

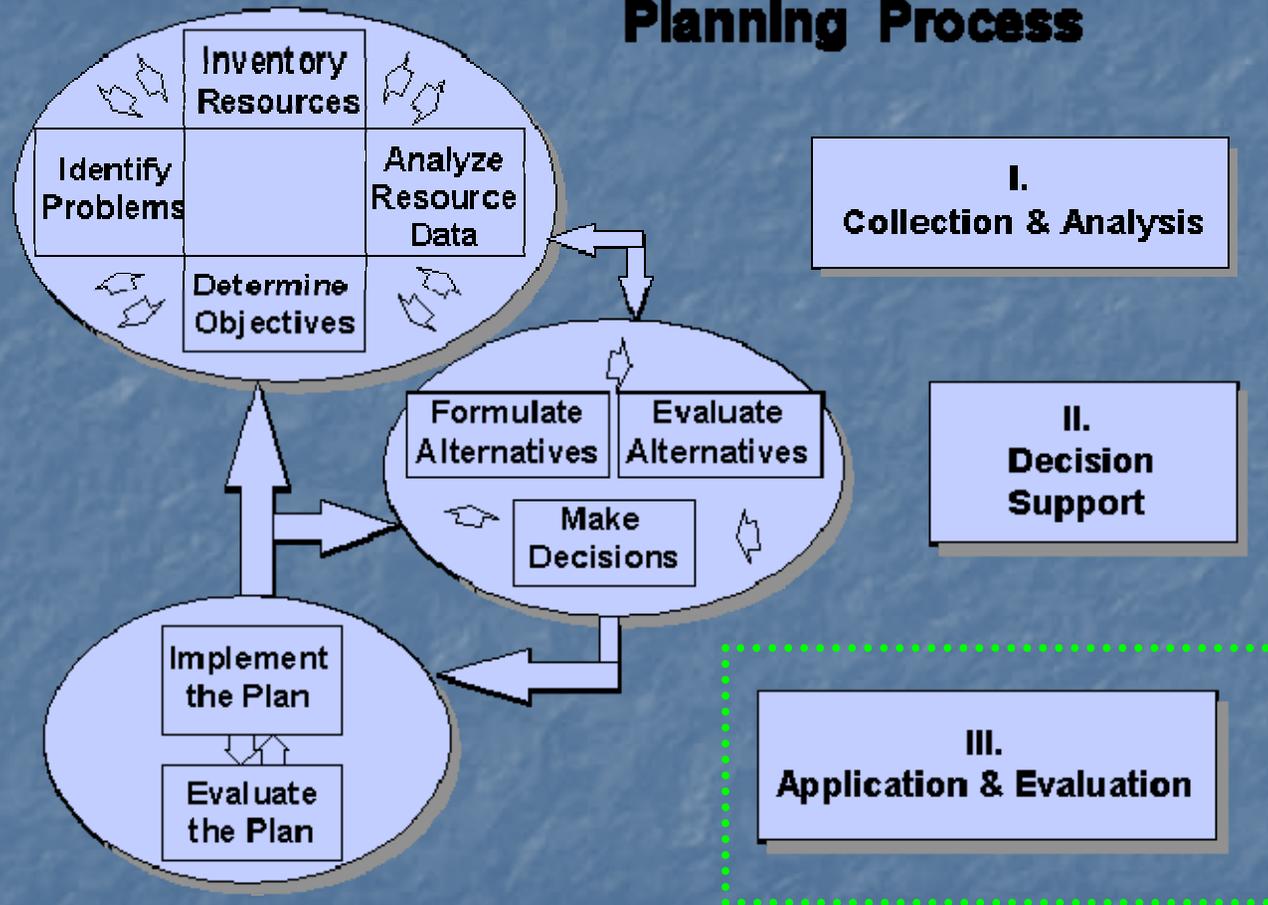
- But what if you had a cap?
- Would make you look professional
- Would keep your pen safe
- Prevents ink from drying out
- Helps you keep track of your pen
- Would you be interested?

Everybody can use the  
**BENEFITS**

But, Nobody needs a cap.



# Planning Process



An illustration of the dynamic nature of the planning process.

# Phase III - Application and Evaluation

## (Understanding the Results)

- 8. Implement the Plan
- 9. Evaluate the Plan



# Step 8 - Implement the Plan

- The client implements the selected alternative(s). The planner provides encouragement to the client for continued implementation.

# Step 9 - Evaluate the Plan

- Evaluate the effectiveness of the plan as it is implemented and make adjustments as needed.

End Results Overall?



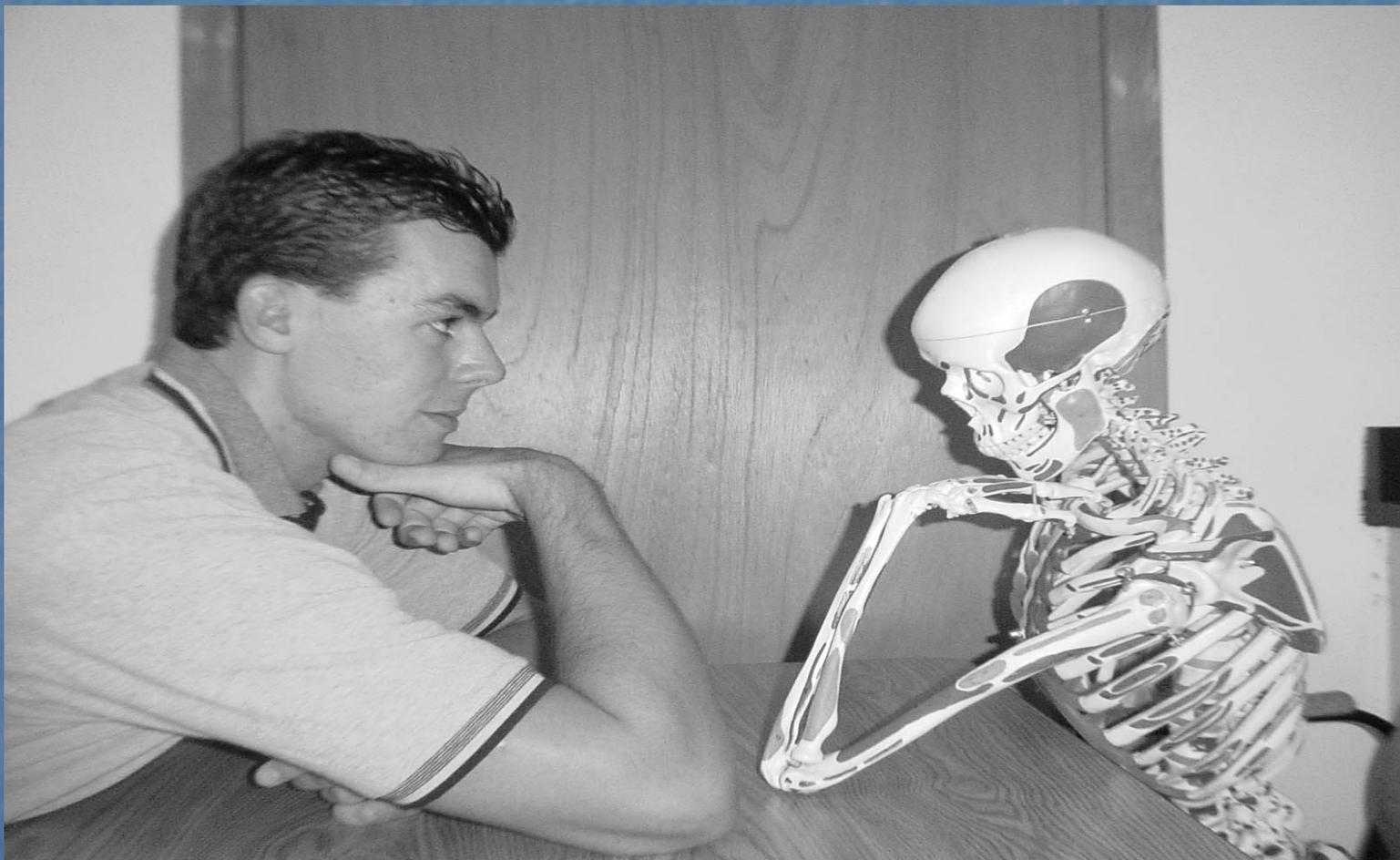
# A Conservation Plan must contain:

- District Cooperative agreement, where applicable
- Clients objectives and decisions
- Soils information (Map and Legend)
- Conservation plan map
- Record of clients decision
- Assistance notes

# Conservation Plan

- Conservation plans are voluntary, site-specific, comprehensive, and action oriented. A conservation plan contains natural resource information and a record of decisions made by the client. It describes the schedule of operations and activities needed to solve identified natural resource problems and take advantage of opportunities.

# A Meeting of the Minds



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