CPCESU Project Management System

Design Review 1

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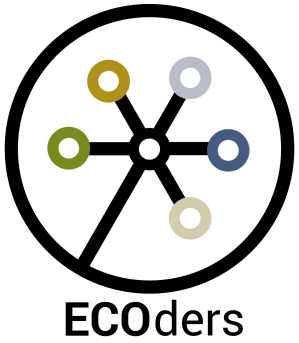

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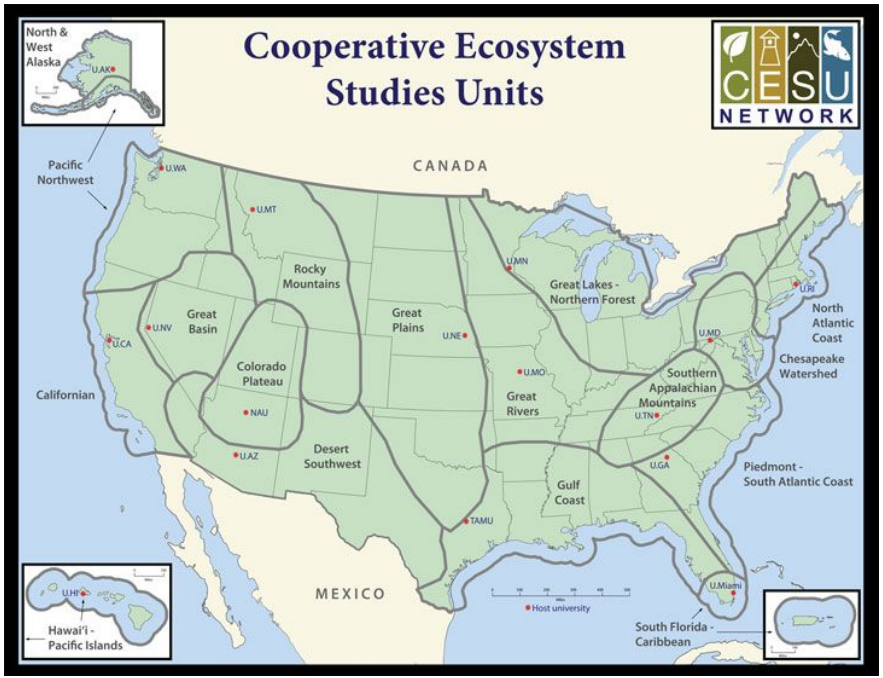
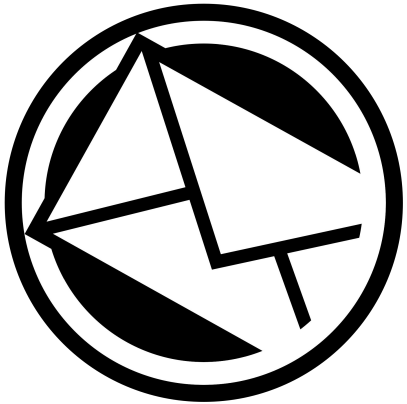
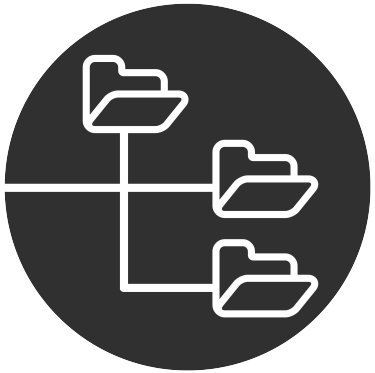
Colorado Plateau Cooperative Ecosystem Studies Unit



- CPCESU is a part of a national consortium for resource stewardship
  - Dozens of projects
  - Hundreds of modifications
  - Millions of dollars

Current Technology





Project Workflow

Proposal

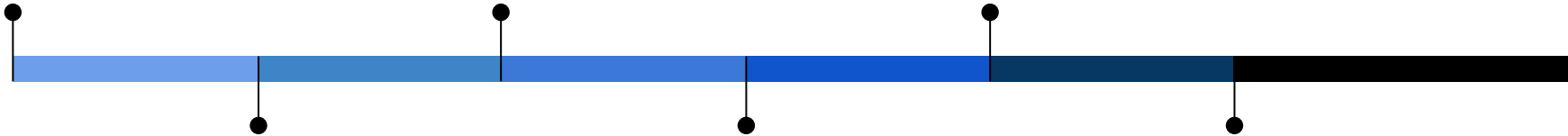
Federal agency starts inquiry to non-government contractor

Acceptance

Both parties sign and work begins

Termination

Parties end project. Final report is created



Drafting

Proposal is passed back and forth

Tracking

CPCESU tracks project including modifications

Reporting

Project archived and used for statistics and reporting

Problems

Proposal

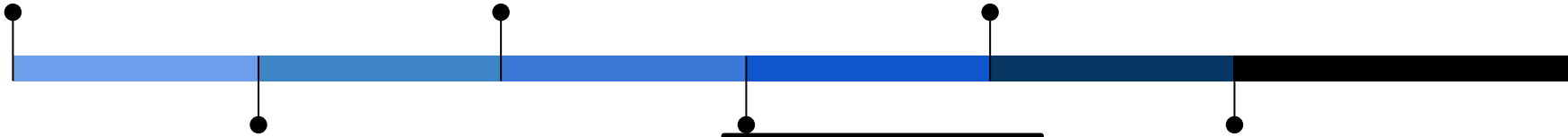
Allow organizations to **Submit** proposals

Acceptance

Notify work has started

Termination

Archive projects



Drafting

Validate information on the contract

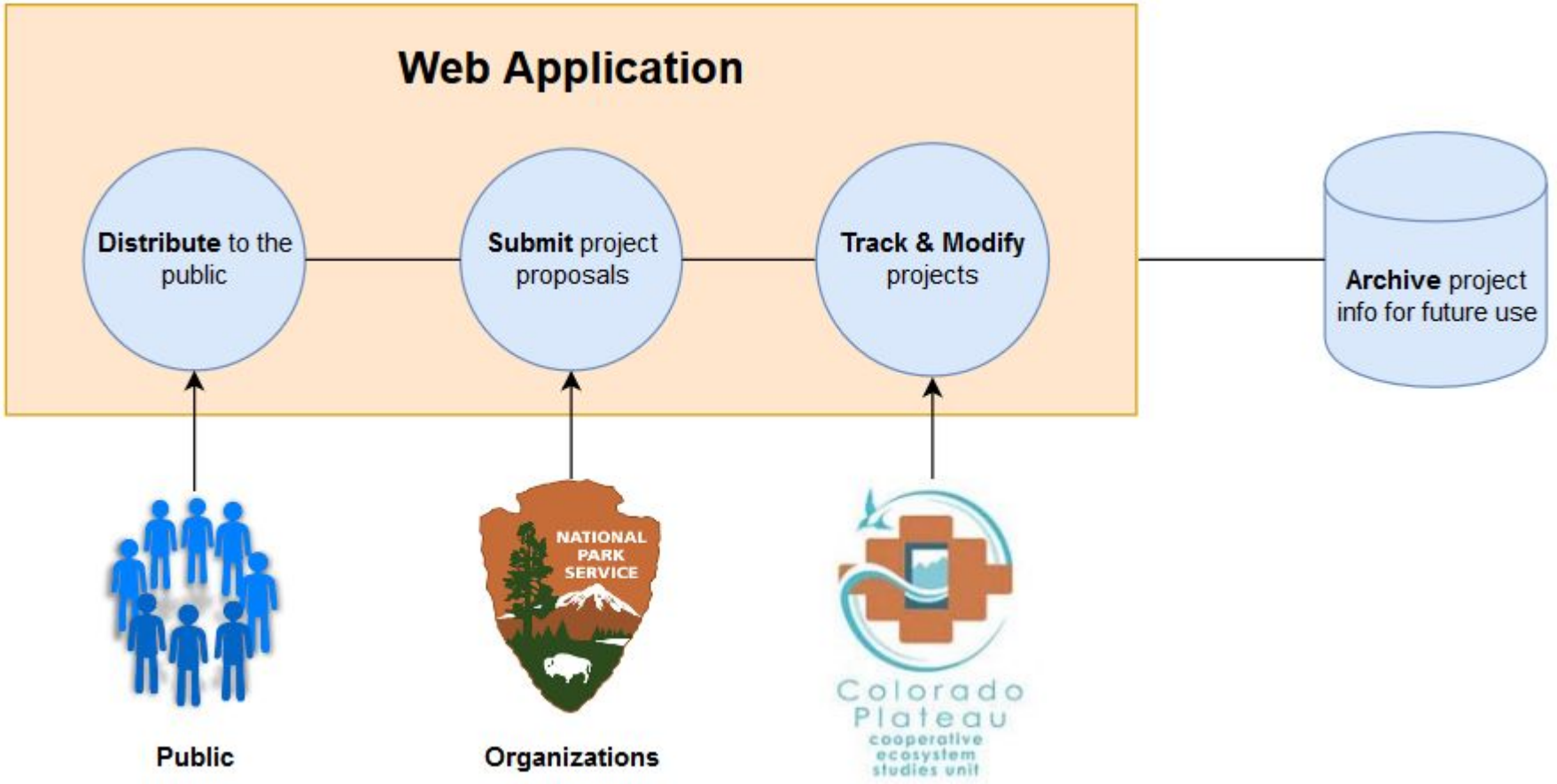
Tracking

Track and **Modify** projects

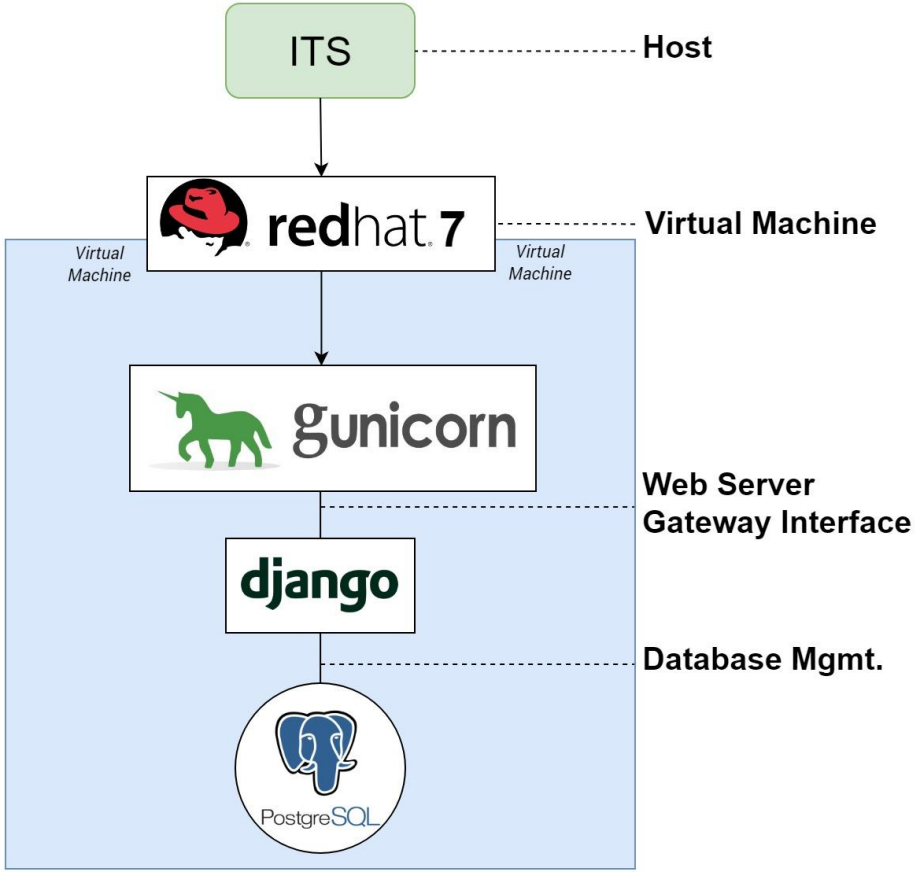
Reporting

Distribute information to management and public

Solution - “Summit”



System Diagram



Elicitation Techniques

Active

- Weekly Interviews
- Observations

Passive

- System Interface Analysis
- User Interface Analysis
- Document Analysis
- Database Analysis

Key CPCESU Staff Requirements

SRS: UR.01 As a CPCESU staffer, I want to track projects so that I understand, at a glance, what the project status is

- To be notified to review and approve of project modifications
- To ensure correct data
- To autofill from a document
- To generate and export data from searches

Key Organization/Public Requirements

Organization

- Create a project
- Make a modification to a project

Public

- To search through CPCESU projects
- To be able to use the website

Top Level Functional Requirements

SRS: F1.00 Projects shall be tracked through their six phases: Proposal, Drafting, Execution, Tracking, Termination, Archive

SRS: F2.00 Options may have buttons large enough for users to click on with a slight shake, as defined in the following sections

Top Level Performance Requirements

SRS: P1.00 The website shall take no more than 250 ms to respond to any user input, as defined in the following sections

- Secure
- Intuitive

Top Level Environmental Requirements

SRS: E1.01 Organizations have a variety of non-standard forms, thus **SRS: F7.00** may not apply for all of these forms

Breakdown to Low Level Requirements

SRS: F2.00 Modifications to a project shall be tracked

- **SRS: F2.01** When a modification is submitted by the organization, a CP Staff shall be notified of the modification
- **SRS: F2.02** The CP staff shall approve or deny the modification
- **SRS: F2.03** The result of this modification shall be logged

Breakdown to Low Level Requirements

SRS: F2.02 The CP staff shall approve or deny the modification

SRS: F2.07 When approved, the modification shall be logged

- See **SRS: F2.03**

SRS: F2.08 When denied, the CP Staffer shall note a reason from a field or a custom one

- Field entries are:
  - -

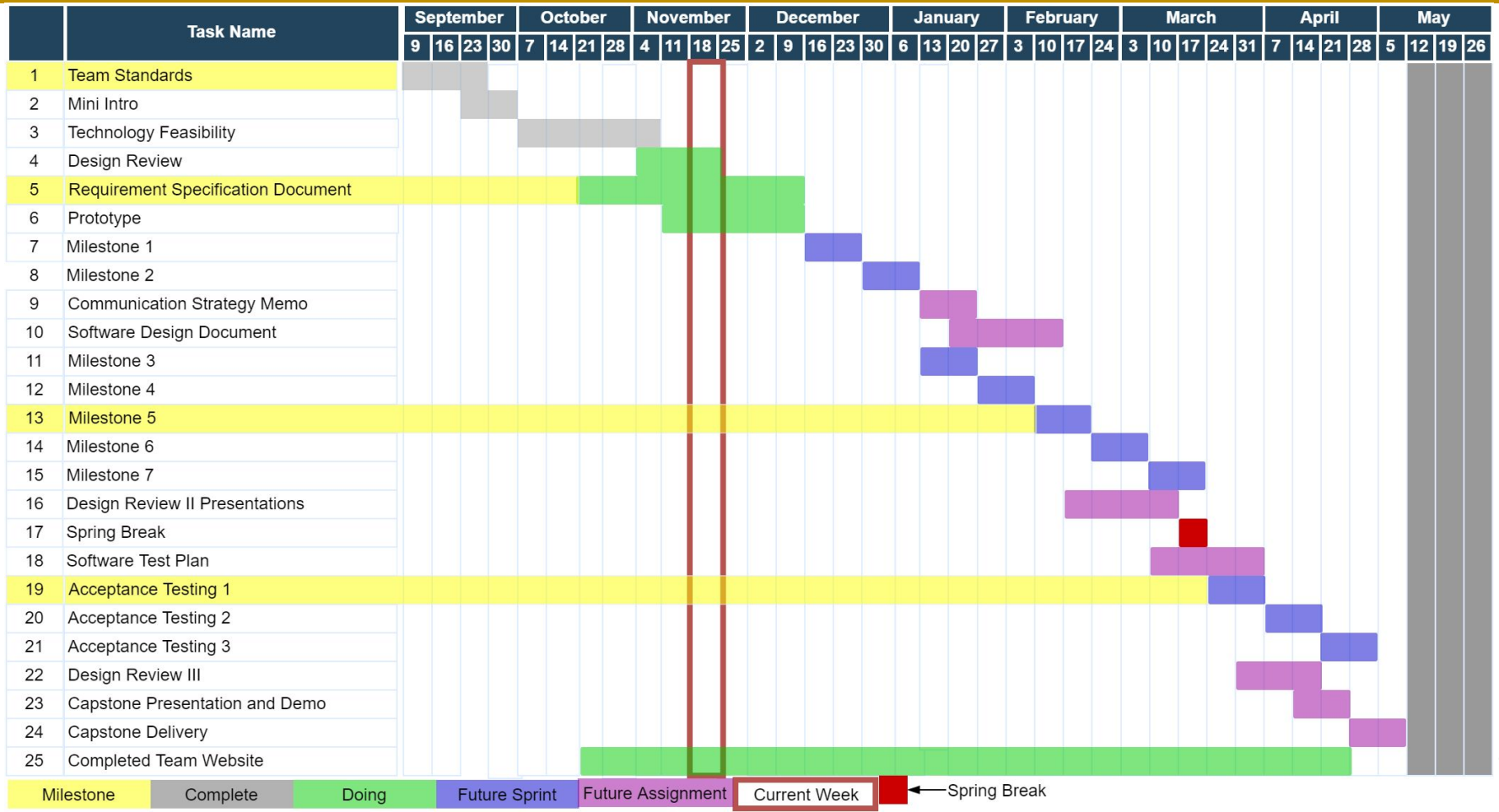
Breakdown to Low Level Requirements

- Modifications to a project shall be tracked
  - The CP staff shall approve or deny the modification
    - When denied, the CP Staffer notes a reason from a field or a custom one
      - Field entries are:
        - Improper paperwork

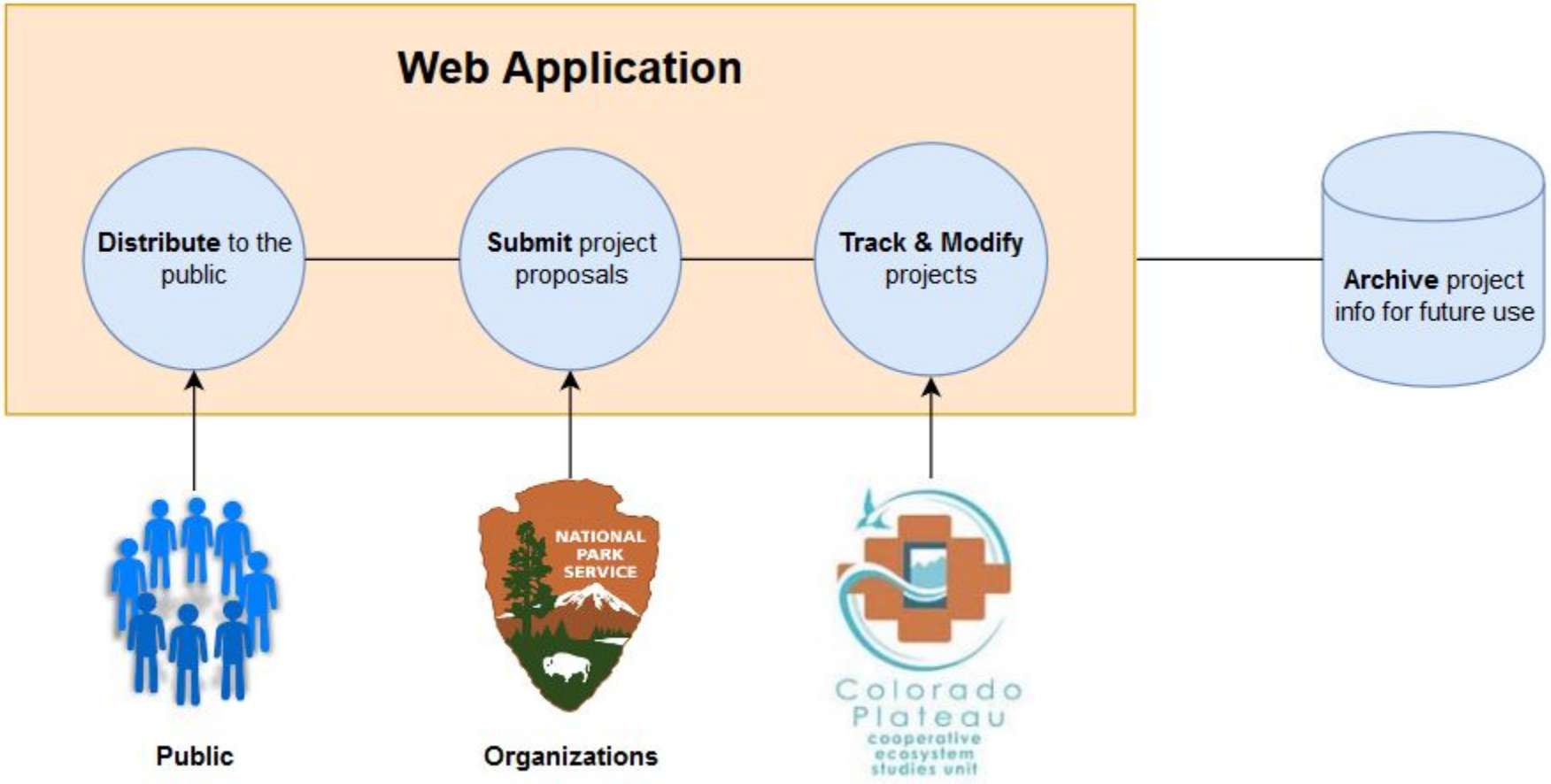
Risks and Feasibility

- **Learning curve too high** | 25% | *High*
  - Overcome with CI/CD, early prototypes
- **Unknown or overlooked requirement** | 10% | *Mid to High*
  - Procedures to modify the SRS after it is signed
- **Security breach** | 5% | *Mid to High*
  - Overcome with security testing

Year at a Glance

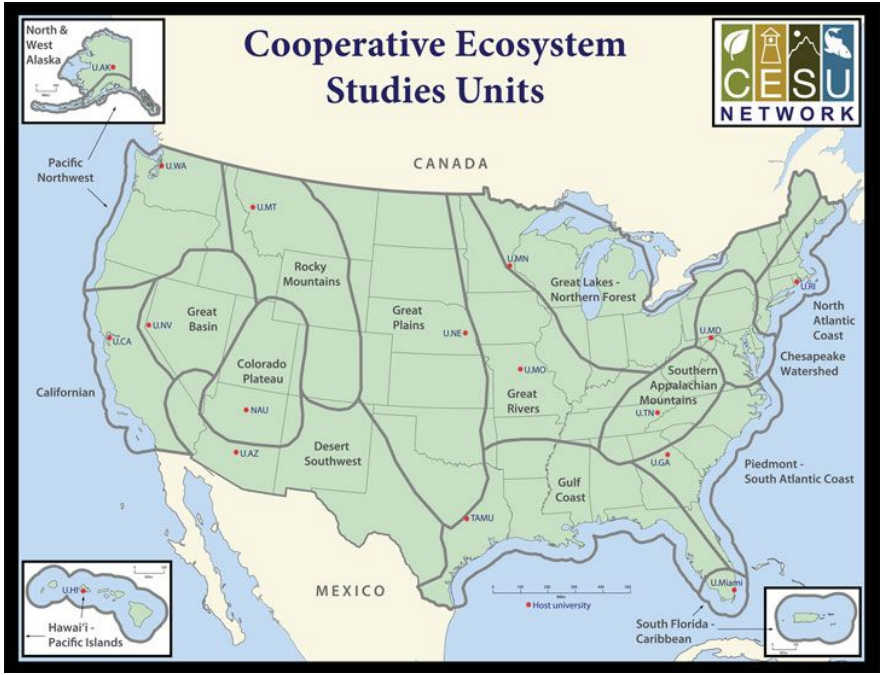


Conclusion

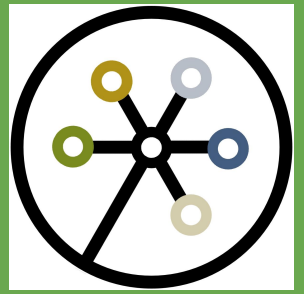

Web Application
Distribute to the public
Submit project proposals
Track & Modify projects
Archive project info for future use
Public
Organizations
NATIONAL PARK SERVICE
Colorado Plateau
cooperative ecosystem studies unit

Broader Impacts

- Better reporting to NAU and other organizations
- Can become the national network's system
- Aiding conservation projects and the environment



CPCESU Project Management System



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Fall Semester Schedule