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# Visual Landscape Assessment

Methodology and Application

# What is landscape?

- The European Landscape Convention defines landscape “*as a zone or area as perceived by local people or visitors*” (ELC art. 1, para. 38)
- “*Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.*” (Council of Europe, 2000)

# What is landscape?

- *“Landscape is about the relationship between people and place. It provides the setting for our day-to-day lives. The term does not mean just special or designated landscapes and it does not only apply to the countryside. Landscape can mean a small patch of urban wasteland as much as a mountain range, and an urban park as much as an expanse of lowland plain. It results from the way that different components of our environment - both natural (the influences of geology, soils, climate, flora and fauna) and cultural (the historical and current impact of land use, settlement, enclosure and other human interventions) - interact together and are perceived by us. People’s perceptions turn land into the concept of landscape”. (Swanwick, C. and Land Use Consultants (2002))*

# Why assess landscapes?

- People value highly scenic landscapes
- Scenery contributes to a "sense of place", a mutually shared image
- Landscape character can be defined and managed
- Scenic integrity is important



Bartram House property

# Things to remember

- Landscape settings required for certain management activities are important
- Landscape visibility is significant
- Visual absorption capability is an important tool
- Diversity is desirable
- Harmony is desirable



# Things to remember

- The public values cultural enclaves in landscapes that are natural or natural appearing
- People cannot always distinguish between natural landscapes and those resulting from historic cultural alterations
- Special places are important
- Types of viewers are important
- Variations in cultures



Hopewell Furnace National Historical Site

# Who conducts landscape visual assessments?

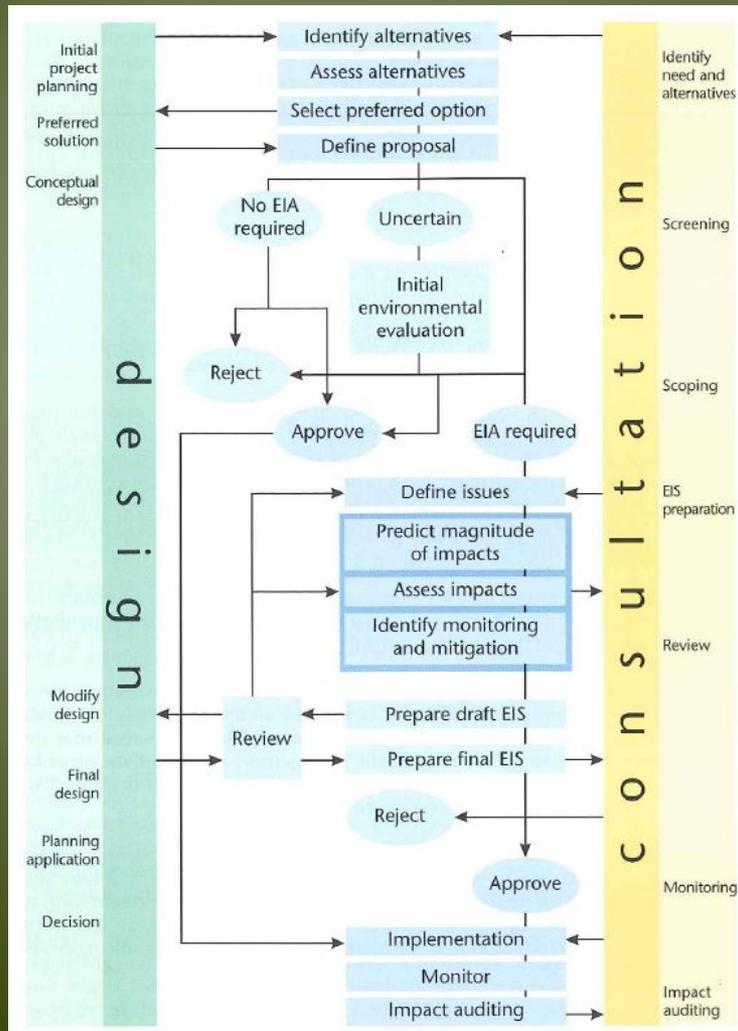
- Federal/State Programs
- Management Organizations
- Planning Committees
- Advocacy Groups



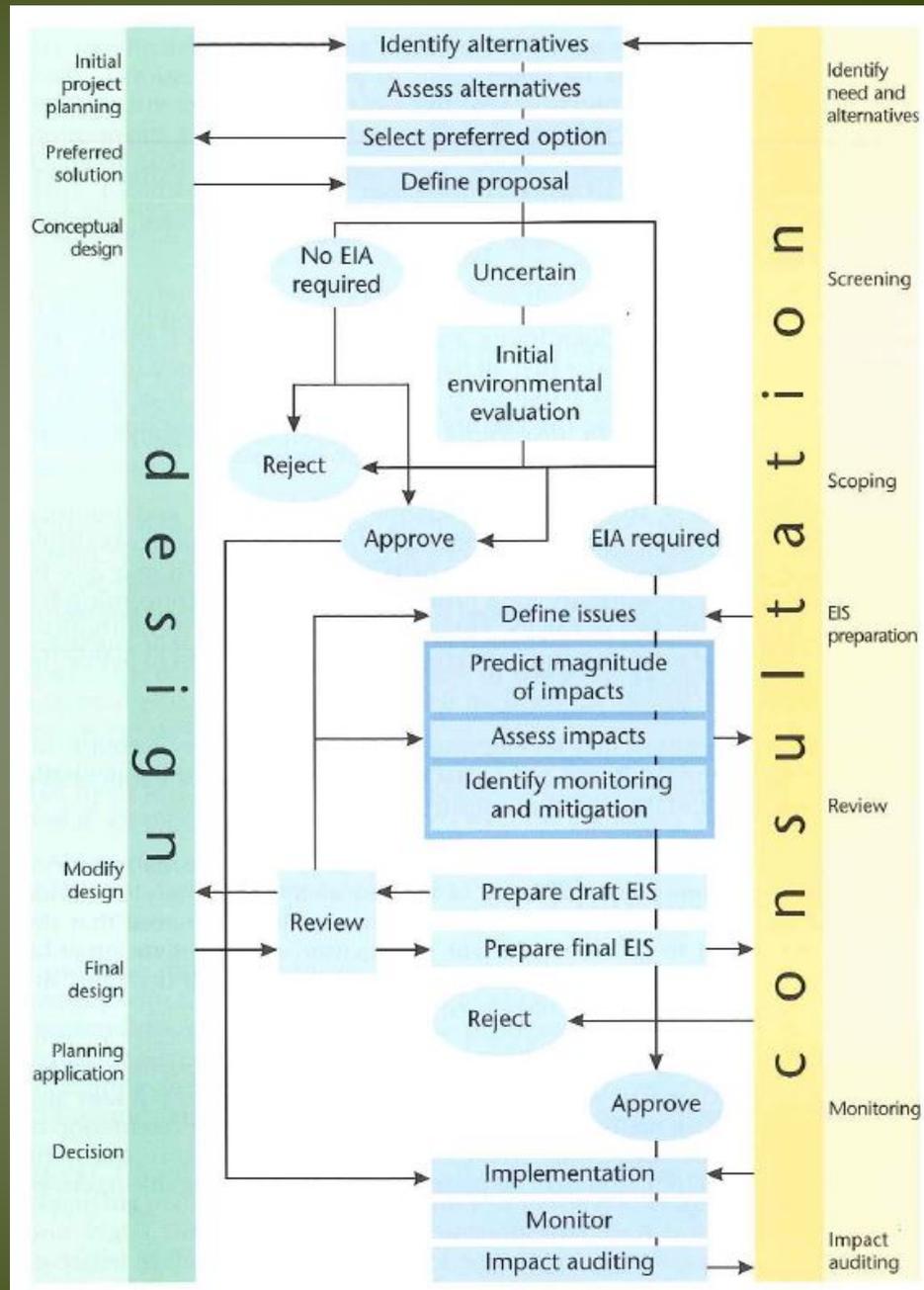
# Landscape and Visual Impact Assessment (LVIA)

The Landscape Institute and the Institute of Environmental Management & Assessment, UK

# Landscape and Visual Impact Assessment



LVIA as part of EIA



L VIA as part of EIA

# Landscape in Environmental Impact Assessment

Environmental Impact Assessment requires a wide range of environmental topics to be investigated. The topics can be summarized as:

- human beings, population
- flora and fauna
- soil ,water, air, climate
- **landscape**
- cultural heritage (including architectural and archaeological heritage)
- material assets

# Two components of LVIA

## Landscape effects assessment

- deals with changes to landscape as a resource

## Visual effects assessment

- is concerned with how the surroundings of individuals or groups of people may be specifically affected by change in the landscape

# LVIA Process

- Baseline Study
- Identification and description of effects
- Mitigation
- Evaluation of effects
- Engaging with stake holders and the public



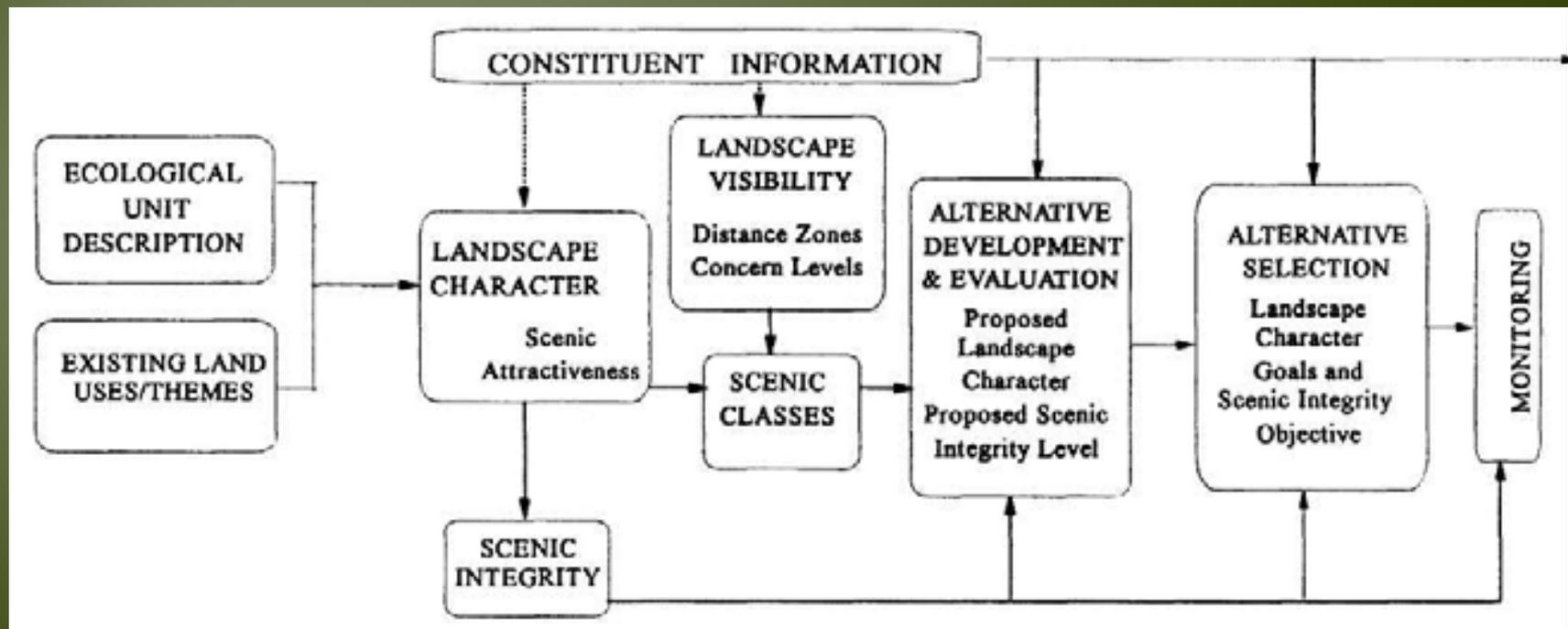
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# Scenery Management System (SMS)

Used by the USDA Forest Service for National Forest Lands

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# Scenery Management System (SMS)



# A Scenery Management System should:

- Be logical and orderly
- Serve scenic assessment needs in all levels of planning and implementation, from broad-scale land planning to detailed project planning
- Produce goals and objectives useful for scenery management.
- Allow scenery managers to be capable of interacting with values and needs of other resource disciplines
- Have a systematic approach so that others are able to replicate its results
- Serve as a communicative tool



**A Scenery Management System should identify the following:**

- Landscape character

A Scenery Management System should identify the following:

- Landscape character
  - Attributes

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- Landscape character
  - Attributes



A uniform closed canopy of overstory vegetation.

# A Scenery Management System should identify the following:

- Landscape character
  - Attributes



Openings in the canopy of overstory vegetation.

# A Scenery Management System should identify the following:

- Landscape character
  - Attributes



Structures that have positive cultural connotations and are recognized as scenic attributes.

# A Scenery Management System should identify the following:

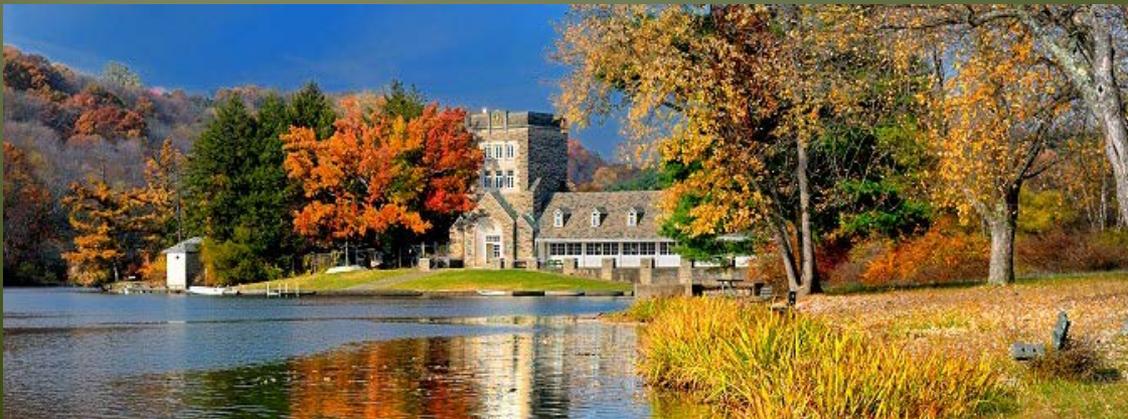
- Landscape character
  - Attributes
  - Character types



Oregon Dunes; Broad Valley Rockies; Sonoran Desert

# A Scenery Management System should identify the following:

- Landscape character
  - Attributes
  - Character types
- Visual sensitivity of landscapes
- Scenic integrity



North Park Pittsburgh



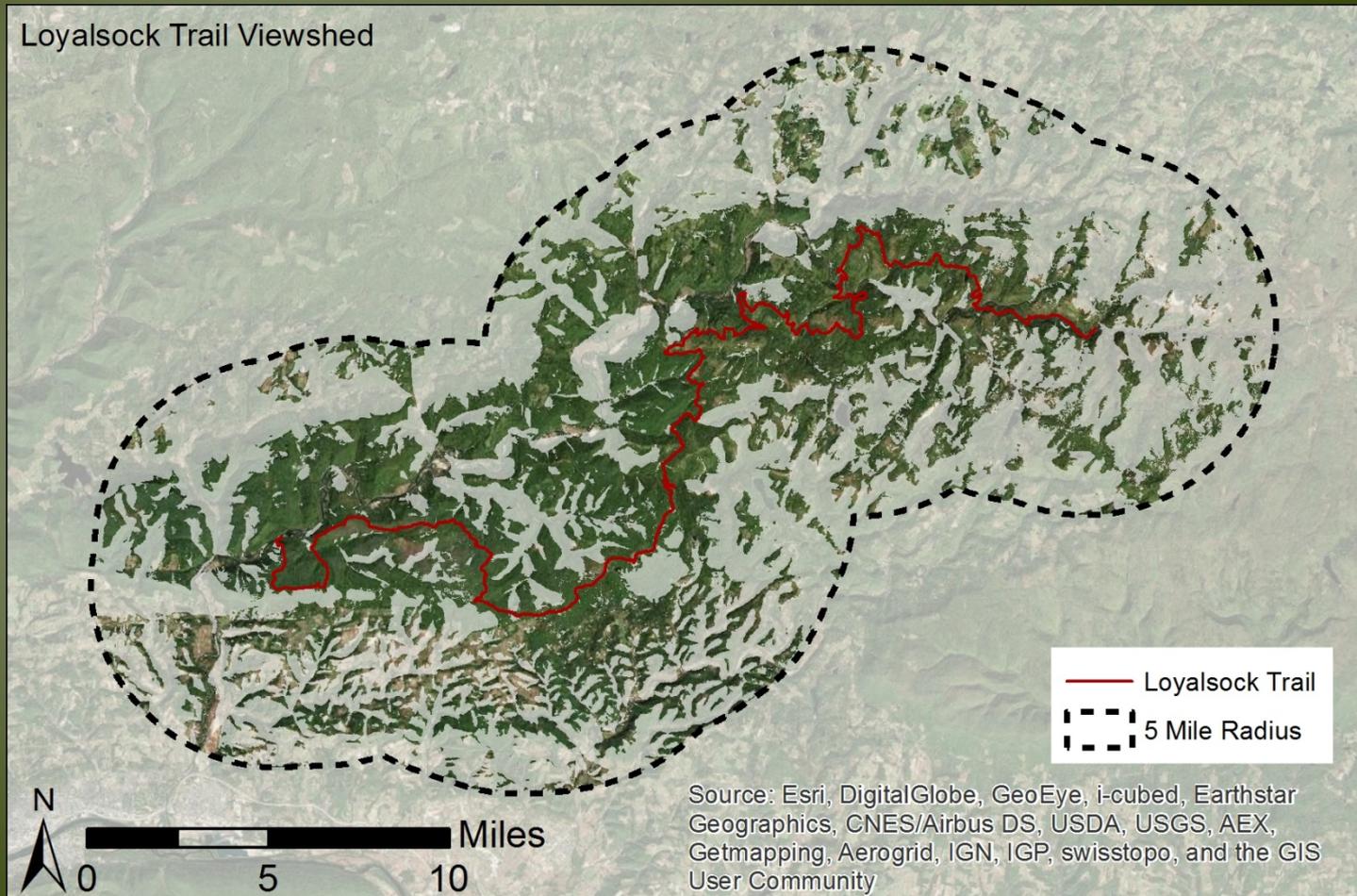
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# Methods of Visual Representation

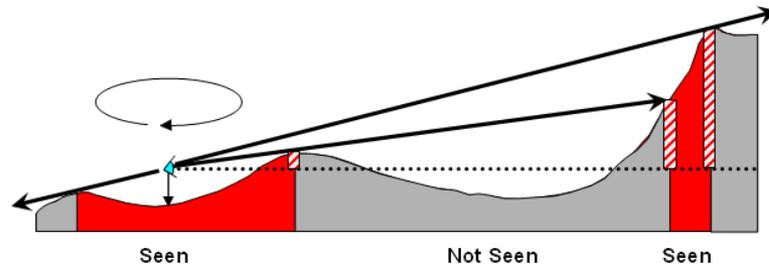
The landscape “as is” and “as proposed”

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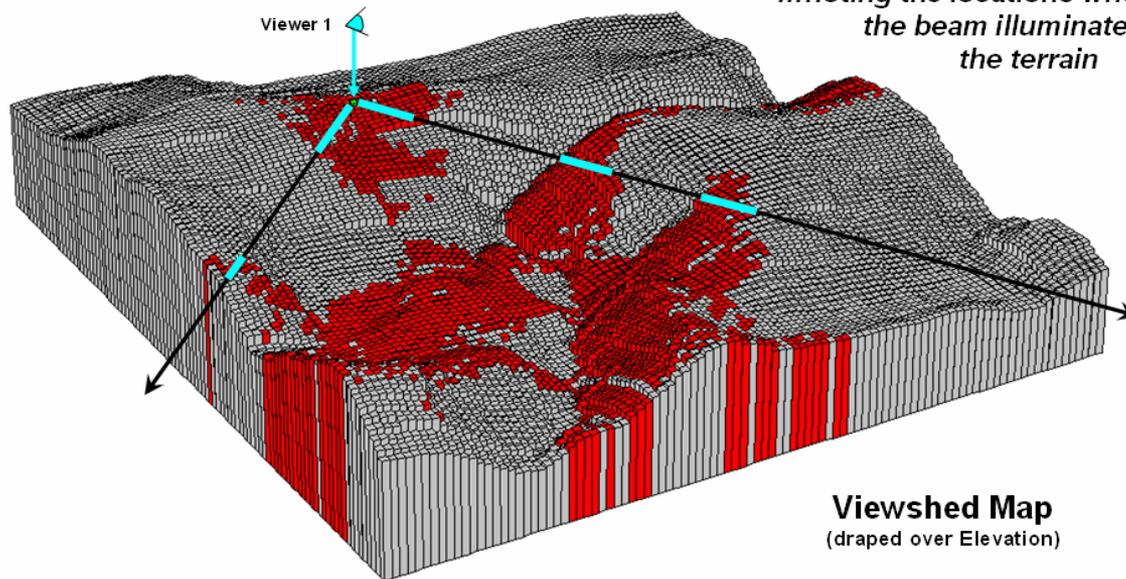
# Viewshed Analysis (2D)



# Viewshed Analysis (3D)



*...a viewshed is like a search light rotating at a "viewer" location...*



*...noting the locations where the beam illuminates the terrain*

**Viewshed Map**  
(draped over Elevation)

# Photomontage



<http://calp.sites.olt.ubc.ca/files/2010/04/home.jpg>

# Photomontage



***Current view of the view across the Kromme from the St Francis Marina. (Photos in Final EIA Report)***



***Future view across the Kromme if the Eastern cluster of turbines is developed.***

<https://sffrancischronicle.files.wordpress.com/2011/07/wind-turbines-before-and-after-photos1.jpg>

# Photomontage



<http://kienviet.net/upload/2011-01/1293135836-ja-visualization-courtyards-2010.jpg>

# Digital models and renderings



# Digital models and renderings



[http://www.bustler.net/images/news2/minneapolis\\_riverfront\\_design\\_competition\\_shortlist\\_3a.jpg](http://www.bustler.net/images/news2/minneapolis_riverfront_design_competition_shortlist_3a.jpg)

The background features a light gray gradient with numerous thin, vertical green lines of varying lengths and positions, creating a textured, grass-like effect. A solid green horizontal bar spans the width of the image near the bottom, containing the title text.

# Resources on Historic Preservation

# Historic Preservation - via ASLA.org

<http://www.asla.org/hals.aspx> > General Resources on Historic Preservation

- Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscapes Survey
- The Historic American Landscapes Survey (HALS)
- Advisory Council on Historic Preservation
- Alliance for Historic Landscape Preservation
- Association of Preservation Technology
- National Association of Tribal Historic Preservation Officers
- National Center for Preservation Technology and Training
- National Conference of State Historic Preservation Officers
- National Landscape Conservation System
- National Preservation Institute
- Olmsted Center for Landscape Preservation
- Preservation Directory
- SAH Archipedia
- Trust for Public Land

# Historic Preservation - via ASLA.org

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## Cultural Landscapes

- Cultural Landscapes Currents
- The Cultural Landscape Foundation

## Gardens

- American Public Gardens Association
- Dumbarton Oaks
- Catena, the Digital Archive of Historic Gardens and Landscapes
- Garden History Links
- Historic Landscape Institute at Monticello
- Institute for Cultural Landscape Studies at Harvard
- Massachusetts Horticultural Society
- Southern Garden History Society
- The Garden Club of America
- The Garden Conservancy
- Wave Hill

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## Heritage Resources

- Canadian Association of Professional Heritage Consultants
- International Council on Monuments and Sites (ICOMOS)
- Preserve & Protect
- The National Trust (UK)
- World Commission on Protected Areas
- World Heritage Convention

## Research

- Archives of American Gardens, Smithsonian's Horticulture Services Division
- Guidelines for Documenting and Evaluating Historic Military Landscapes: An Integrated Landscape Approach
- HABS/HAER/HALS Library of Congress Collection
- Library of American Landscape History
- National Historic Landmark database

# Historic Preservation - via ASLA.org

<http://www.asla.org/hals.aspx> > General Resources on Historic Preservation

## Research cont.

- National Register of Historic Places database
- Guidelines for Evaluating and Documenting Traditional Cultural Properties
- NPS History E-Library
- Preservation Brief 36: Protecting Cultural Landscapes
- Secretary of the Interior's Standards and Guidelines: Archeology and Historic Preservation
- The Secretary of the Interior's Standards for the Treatment of Historic Properties & Guidelines for the Treatment of Cultural Landscapes
- The University of Toronto's Centre for Landscape Research

## National Register Bulletins:

- Guidelines for Evaluating and Documenting Rural Historic Landscapes
- Guidelines for Evaluating and Documenting Traditional Cultural Properties
- Guidelines for Evaluating and Registering Cemeteries and Burial Places
- Guidelines for Identifying, Evaluating, and Registering America's Historic Battlefields
- Guidelines for Identifying, Evaluating, and Registering Historic Mining Properties
- Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places
- How to Evaluate and Nominate Designed Historic Landscapes
- National Register of Historic Places database

**Thank you. Any questions?**