Local Land Use Planning and State Trust Land Management in the West

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Susan Culp, Project Manager

Western Lands and Communities

A Joint Venture of the Lincoln Institute of Land Policy and Sonoran Institute
Western Lands and Communities
State Trust Land Program

• Seeks to broaden the range of land use information, tools, and policy options available to state trust land managers and diverse stakeholders for long-term, sustainable management of trust lands.
Lincoln Institute of Land Policy – Sonoran Institute Joint Venture

- Partnership established in 2004
- Lincoln Institute of Land Policy founded in 1974 by the Lincoln family – inspired by the works of Henry George
  - *Progress and Poverty* (1879)
- Land value tax – concept that land ownership and valuation structures could be used to generate public goods
What and Where are State Trust Lands?

- Intermountain West: Sonoran Institute’s core geography
Public Lands in the West

- Public lands in the West that are in federal ownership
  - BLM
  - US Forest Service
  - Parks & wilderness areas
Add in Tribal Lands...

- Federal public lands
- Tribal lands
State Trust Lands: A Unique Category of Lands in the West

- Granted to states by Congress upon entrance into the Union
- Held in a perpetual, intergenerational trust to support a variety of public institutions – the primary beneficiary being public schools
- Managed largely for revenue generation – grazing and agricultural leasing, commercial leasing, real estate development, oil/gas/mineral extraction
- 23 states still hold state trust lands from their original grant – mostly in the interior West – totaling approximately 46 million acres
State Trust Lands in California

- Original grant of 6.1 million acres – 470,000 acres remain
- Scattered, checkerboard pattern concentrated in the southeastern area of the state
Origin of State Trust Lands

• Following Revolutionary War, Congress faced three-part challenge
  – Flood of recent immigrants and settlers heading West
    • Jeffersonian vision: a free people must be an educated people
  – Need to secure claims to the frontier from rebellion or European rivals
  – Massive war debts and limited federal revenues
• Solution: General Land Ordinance (1785) and Northwest Ordinance (1787)
  – Federal government had one resource in abundance: land
  – Organizing settlement through rectangular survey, repaying national debt through sale of lands, providing for education and essential services through trust grants
Northwest Ordinance (1787)

- Created a system of territorial governments and process for transitioning territories into new states
- Article V required that states be admitted on “equal footing” with the existing states
- Carried through the vision of cheap land, state equality and public education as critical to the success of western settlements
- Ohio (in 1803) was the first “public domain” state admitted to the union which received a land grant in support of schools
State Trust Land Grants

- New states received the central section of every township as reserved lands (Section 16) to support public education
  - Mathematical vision of community-building
  - Originally reserved to local township, consistent with agrarian vision
    - Later, reserved to the state
  - Grants later expanded to include 2, 32, 36 as well (Western lands not amenable to farming)
- Congress also issued block grants for universities, hospitals, and other essential state functions
The Trust Responsibility

• The trust lands grants in the lower 48 states were brought to a close with the New Mexico-Arizona Enabling Act of 1910
  • Most extensive land grants of any of the lower 48 states
• Enabling Act imposed detailed requirements for trust management and stated explicitly that lands were held in “trust”
  • U.S. Supreme Court found that a legal “trust” was created by the Enabling Act
  • Since then, all Western states except CA have found that their lands are also held “in trust”
What is a “trust”? 

- A trust is a legal relationship in which one party holds property for the benefit of another. 
- Three parties: 
  - “Settlor” or “trustor” – establishes the trust 
  - “Trustee” – administrates the trust 
  - “Beneficiary” – receives the benefits of the trust 
- Identified beneficiary or charitable public purpose for which the property is held in trust. Typical examples: 
  - Family trust for education of direct descendants 
  - Charitable trust for education of children in the community (state trust doctrine similar to charitable trust) 
  * NOTE: state trust is NOT a private trust – it has a public mission and public beneficiaries
Fiduciary Duties of Trustees

• Duty to follow the settlor’s instructions
  – Manage trust resources for the intended purpose

• Duty of loyalty
  – Cannot put interests of self or third parties ahead of interests of trust/beneficiaries

• Duty of prudence
  – Due care, diligence, and skill in management of trust (affirmative and negative conduct)
    • Appropriate expertise, diversification, investigation and assessment, monitoring and re-assessment

• Duty to preserve the trust
  – Protect trust corpus to ensure that trust objectives are met for the long term
Trustee’s Additional Obligations as a Public Entity

- Important to understand that state trust managers are NOT private trustees, and trust beneficiaries are NOT private beneficiaries
  - Trust is a public obligation to public beneficiaries
  - It is not the school board association’s trust or the teacher’s union’s trust – it is a trust for a broad public purpose, intergenerational in nature, with a long term focus for current as well as future beneficiaries
- Trust land managers have a broader obligation as public agencies
  - Higher standards for environmental analysis of trust activities
  - Consideration of fiscal impacts to communities before approving developments on state trust lands (Colorado & Arizona)
  - Public notice and reporting of trust related decisions
  - Hold public hearings, maintain public records, and accept public comments
  - Subject to legislative appropriations and directives (although legislature is ALSO subject to the trust responsibility)
Total Trust Land Holdings in the Western U.S.
Importance of State Trust Lands to the Future of the West

• Trust lands represent a tremendous resource for education, conservation, and for the future development in western states
  – In Arizona, there are over 1 million acres in or adjacent to urban areas
  – Approximately 50% of future developable lands in the Sun Corridor megaregion are state trust lands
    • 70% of North Phoenix developable area
    • 66% of Pinal County developable area
• Also represent the largest tracts of remaining un-subdivided lands in proximity to growing urban areas
  – Ideal for master-planned communities and other large-scale uses
  – Ideal for landscape-scale preserves accessible to urban areas
  – Could generate tens of billions in revenue for education
  – The manner in which they are developed and conserved will shape future development patterns and quality of life in the West
Colorado State Land Board

Tobin Follenweider
New Partners for Smart Growth
Session: Local Land Use Planning & State Trust Land Management in the West
Outline

- Colorado State Board of Land Commissioners (CSLB)
- Current ownership pattern and income
- Cooperative Projects
  - Mountains to Plains Energy-By-Design Project
  - Rocky 16 Land Exchange
- Conclusions
Colorado State Board of Land Commissioners

- Created in 1876 in State Constitution. Section 16 & 36 of every township,

- A perpetual, intergenerational public trust in support of public schools and public institutions.

- Dual mission: 1) produce reasonable and consistent income for the trusts, and 2) provide sound stewardship of the assets of this intergenerational public trust

- Manages 8 trusts for public beneficiaries, the largest of which is the Public School Trust (over 95% of revenue and ownership)

- Governed by five-person Board of Commissioners representing specific areas of experience.
Second largest landowner in state with 2.8 million surface acres and 4.0 million acres of mineral estate.

$122 million revenue in FY 2010-11
- Minerals (oil, gas, and coal) is dominant revenue (88% of total)
- Agriculture and Commercial

44 employees and $5 million budget.
- 9,000 contracts and leases
- 270,000 square feet of office/warehouse
- 250,000 acres of renewable energy leases
- 12 large (25,000 acres to 80,000 acres) consolidated ranches

Trust lands are held by the state for a specific purpose and are not open to public access without authorization.

Comply with local land use regulations and land use plans
Ownership

Colorado State Land Board Surface and Mineral Ownership

- State Land Board – Surface Ownership
- State Land Board – Mineral Estate
- Stewardship Trust
- SLB District Boundary
- County Boundary
- Interstate Highway
- State Highway
- Major River

* Data based on information from SLB database (1/1/79) and updated transactions through 1/1/09.
^ Approximately 300,000 acres for 10% of SLB lands are held in Stewardship Trust. The Trust seeks to protect the long-term productivity and sound stewardship of important sections of these parcels.
Local Government Cooperative Projects

- **Mountains to Plain Energy-By-Design (MP2EBD) Project**
  - Colorado State Land Board
  - Larimer County
  - City of Fort Collins
  - The Nature Conservancy

- **Rocky 16 Land Exchange**
  - Colorado State Land Board
  - Jefferson County
  - Boulder County
  - City of Boulder
  - Jefferson Parkway Public Highway Authority (JPPHA)
  - U.S. Fish and Wildlife Service (USFWS)
  - Department of Natural Resources Executive Directors Office
Mountains to Plains Energy-By-Design Project
Mountains to Plains Energy-By-Design Project

- 16,000 acres of severed mineral estate in northern Larimer County
- Minerals under 60,000 acres of public open space parcels along the Colorado and Wyoming border
- Mineral estate is primary estate
- Severed estate nominated for oil and gas leasing.
- Increased interest due to the Niobrara shale oil play.
- Minimal history of oil and gas leasing and no production
- Leasing has high quantifiable and unquantifiable cost for the Board and the prospective oil and gas operator.
- State and Local Government permitting required.
Mountains to Plains Energy by Design (M2PEBD)

- **SLB Mineral Estate**
- **SLB Surface Ownership**
- **Project Area Outline**
- **Existing SLB Leases**

Legend:
- SLB Mineral Estate
- SLB Surface Ownership
- Project Area Outline
- Existing SLB Leases

2012 - State Land Board
Mountains to Plains Energy-By-Design Project

- Mountains to Plains Energy-By-Design Project
  - Develop a plan for oil and gas development:
    - State Land Board – Mineral estate development
    - City of Fort Collins and Larimer County – Avoid and minimize surface impacts
  - TNC Energy-By Design
    - Plan up front/fewer surprises; Includes state and local regulators.
    - Increase Public Relations
    - Achieve goals for conservation, energy, cultural and other values
    - Creates Mineral Development Plan; may create offsite plan
    - Opportunity to include other mineral owners/lessees which include Anadarko, Marathon, and Chesapeake
  - Oil and Gas Lease to be issued by end of 2012
Mountains to Plains Energy-By-Design Project

TNC - Energy by Design

- A science-based and stakeholder process to identify opportunities to avoid, minimize, and/or mitigate the impacts of energy development across a region

- **No Net Loss or Net Gain for Nature**
  - Inform negotiations between surface owners, operators
  - Understand tradeoffs, spend $ wisely
  - Can mesh with Wildlife Mitigation Plans
Rocky 16 Land Exchange
Rocky 16 Land Exchange

- Rocky 16 Property
  - The State Land Board owns 640 acres – “Rocky Section 16” northwest of Denver.
  - A prelaw mining site
  - Multiple ROWs that bisect the section and limit access
  - Good highway access
  - Surrounded by commercial and future residential development as well as county and federal open space
  - Fair market value – $9 million
Rocky 16 Land Exchange

- Industrial Development
- Rocky Flats Wildlife Refuge
- Old Woman Creek Wildlife Corridor
- Prelaw Clay Mine
- Private Reservoir
- Zoned Residential and Commercial

Boulder County Open Space
Rocky 16 Land Exchange

• Local Governments
  • Long-standing open space protection and transportation goals for the northwest quadrant of the Denver metropolitan area.
  • Since the mid 1990’s the concept of a beltway/highway around the Denver metro area.
  • The Jefferson Parkway is the proposed final link to this beltway, connecting C-470 near Golden to the Northwest Parkway near Broomfield.
  • Jefferson Parkway needs ROW along edge of Rocky Flat Wildlife Refuges – Loss of open space
Rocky 16 Land Exchange

- Rocky 16 Land Exchange:
  - US Fish and Wildlife sells ROW to Jefferson Parkway
  - Jefferson County, Boulder County, City of Boulder, US Fish and Wildlife and others purchase Rocky section 16 as open space offset
  - All Rocky 16 ownership transferred to US Fish and Wildlife for Rocky Flat Refuge
  - Major public open space corridor/link created
  - State Land Board receives fair market value of $9 million for reinvestment
  - Status
    - Two local governments sued because concerns over traffic impacts from Jefferson Parkway.
    - Projected close – September 2012
    - All money and property patents are in escrow
Conclusion – Cooperative Projects

- Perpetual, intergenerational entities
- Create legacy
- Different constituent/beneficiaries; find mission overlap
- Develop creative solutions to historic land ownership patterns
- Engage stakeholders early
- Dedicated effort
- State Land Board and Local Government can meet constituent goals:
  - State Land Board - fair market value for property and ability put equity to productive use for trust beneficiaries
  - Local Governments - control the use of property and provide quality amenities for citizens
State Trust Lands and Sustainability: A Scenario Planning Approach

C.J. Gabbe, AICP
New Partners for Smart Growth
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Scenario Planning Approach

- Start at the smallest possible scale
- Use cutting-edge software tools to model buildings, trips and neighborhood variables
- Design multiple scenarios to model and test different futures at a range of scales
Why Use Scenario Planning for State Trust Lands?

• Weigh choices against consequences
• Test policy options quickly
• Prepare for uncertainty
• Develop strategies to optimize outcomes
What is Envision Tomorrow?

- Suite of open source planning tools:
  - Return on Investment (ROI) Model
  - Scenario Builder extension for ArcGIS
Who is Using Envision Tomorrow?

- Sonoran/Lincoln Joint Venture
- Southern California (SCAG)
- Chicago (CMAP)
- City of Portland
- Portland Metro
- Envision Utah
- Univ. of Utah
- Fresno COG
- City of Tulsa
- City of Indianapolis
- And many others…
Lincoln Institute of Land Policy

Case Study in *Urban Planning Tools for Climate Change Mitigation* (2009)
Scenario Planning/ process

**Step 1:** Scenario development starts by creating a library of building types that are financially feasible at the local level.
Scenario Planning/ prototype buildings

Why start with buildings?

*Easily modeled & lots of existing data*

- Density and Design
- Rents and Sales Prices
- Costs and Affordability
- Energy and Water Use
- Fiscal Impacts

Use the ROI Model...

...to Create a Range of Buildings
Scenario Planning/ process

**Step 2:** Define the buildings, streets and amenities that make up all the “places” in which we live, work and play
Scenario Planning/ development types
A Variety of Buildings, Streets and Amenities Create a “Place”

Town Residential  High Mix

Neighborhood Residential

Suburban Residential
Scenario Planning/ process

**Step 3:** Design several possible future land use scenarios to test the implications of different decisions or policies.
Scenario Planning/“painting” the future landscape
Scenario Planning/ process

**Step 4:** Compare the scenarios and monitor the impact of land use decisions in real-time
Scenario Evaluation

- Evaluation criteria include:
  - Land Use: density and mix of uses
  - Transportation: mode choice, VMT
  - Housing: mix and affordability
  - Fiscal Impact: local revenue and infrastructure
  - Environment: open space and agriculture
  - Sustainability: energy use, carbon footprint, water and wastewater
Scenario Planning for State Trust Lands: Superstition Vistas
SUPERSTITION VISTAS SCENARIO REPORT
A SUSTAINABLE COMMUNITY FOR THE 21ST CENTURY
Land Use Since 1950s:

*Predominantly Single Use Development*
Land Use Concepts for Reducing GHG

Local Centers, Transit, Regional Economic Growth
Scenarios for Superstition Vistas

A

B

C

D
Scenario A

- Shown using overall density to represent future growth
- “Density” = Households + Jobs per acre
Scenario B

• Shown using overall density to represent future growth

• “Density” = Households + Jobs per acre

Developed 56%
Preserved 44%

Housing Mix

- Multi-Family - 20%
- Townhouse - 13%
- Single Family - 67%

Superstition Vistas Scenario B
Scenario C

• Shown using overall density to represent future growth
• “Density” = Households + Jobs per acre

Developed 39%

Preserved 61%
Scenario D

- Shown using overall density to represent future growth
- “Density” = Households + Jobs per acre

Developed 27%

Preserved 73%

HOUSING MIX

- Multi-Family - 55%
- Townhouse - 10%
- Single Family - 35%

Density

- Low
- Medium
- High

Superstition Vistas

Scenario D

- Study Area
- Existing Road
- Creeks and Washes
- Central Arizona Projects
- 100 Year Floodplain

Proposed Network

- Rail Transit
- Regional Rail
- Freeway
- Arizona Parkway
- Major Road

- Density
- Low
- Medium
- High
Initial Scenario Comparison
Led to Scenario S: Draft Preferred Alternative
Aggressive Jobs-Housing Balance

Scenario S: 1.34
Scenario D: 1.34
Scenario C: 1.18
Scenario B: 1.18
Scenario A: 0.96
Led to Half the National VMT
(per person per day)
Hard to change behavior, but scenarios proved big carbon savings by simply shortening trips (even if most are still auto trips)
Transportation Emissions (CO2)
Tons of CO2 per Year

- **Scenario A**: Fleet 1: 22.5 MPG, 0% Electric
- **Scenario B**: Fleet 4: 60 MPG, 20% Electric or Renewable Fuel

Bar chart showing annual CO2 emissions for different scenarios.
Residential building types have least cost to "green" for most CO2 reduction

Incremental Cost per Pound of CO2 Usage

- Good
- Better
- Best
Finding the Cost-Benefit “Sweet Spot”

Half the GHG emissions of Scenario A “Baseline”

Achieves nearly the reduction of Scenario S “Better” but for half the cost…

Twice the benefit over Baseline… for half the cost.

CO2 Emissions (lbs/yr)

Incremental "Greening" Cost

![Chart showing CO2 Emissions and Incremental Cost]
Lessons Learned

A balance of nearby jobs and housing is important

- Most of the carbon emissions reduction occurred from people making shorter auto trips
Lessons Learned

Mixed use centers and corridors connected by transit – don’t overlook bus (i.e.- BRT)

Rail Transit
- Focusing growth around rail transit station areas increases ridership

Bus Transit
- Largest amount of transit ridership occurred on standard bus and rapid bus corridors
- Successful bus corridors can evolve into future BRT or light rail corridors
Lessons Learned

Balanced housing for the future population

• Balance product types – shifting demographic profile
• Balance across region – needed to reduce commute distance
• Mixed income communities are key
Lessons Learned
Walkable design is crucial

- Streetscape is important
- Bad design prevents people from walking to their destinations
- Most models don’t show the full benefit of increased pedestrian trips
Lessons Learned

Strategic, cost-effective green building requirements

- Tackle low hanging fruit now
- Balance gains with cost
- Include low or no cost improvements: i.e., light colored roofing and pavement, 3 year payback improvements, etc.
Lessons Learned

Green the grid

• Set aside land for renewable energy development
• Plan for district energy development and cooling
Lessons Learned

Green the fleet

- Start with transit and public vehicles
- Provide incentives for private fleets
- Encourage leading edge electric vehicle infrastructure
Thank You

C.J. Gabbe, AICP

cj@frego.com
971-244-4159
Superstition Vistas: Unlocking its Potential
A Vision for 21st Century Opportunities

www.superstition-vistas.org
• Sandie Smith,
  President and CEO
  Pinal Partnership
• (480) 528-9747
• E-mail: sandie@pinalpartnership.com
• Web: www.pinalpartnership.com
Superstition Vistas - Planning Area

- 275 Square miles
- Single Owner: State Land Department
Superstition Vistas - Planning Area

Size Comparison to Valley Cities

- TEMPE
- MESA
- GILBERT
- CHANDLER
The Sun Corridor may grow to 15 million people by 2050.
History - Superstition Vistas Comprehensive Planning Project

• Phase I
  - East Valley Partnership/Pinal Partnership Collaboration
  - Formation of Stakeholder Group - Steering Committee
  - Review of other Master Planned communities: Irvine Ranch, Florida Developments, Verrado
  - Fundraising/RFP Process/Contract with Robert Grow Consulting Team
History - Superstition Vistas Comprehensive Planning Project

• Phase II - Initial Phase
  - Values Research
  - GIS Database
  - Environmental Assessment
  - Economic Assessment
  - Guiding principles

• Phase II - Scenario Planning
  - Build integrated model
  - Environmental Framework
  - Building Prototypes
  - Build Alternative Scenarios
  - Evaluate Scenarios
  - Develop Preferred Scenario
History - Superstition Vistas
Comprehensive Planning Project

• Phase III
  - Develop Final Report/Recommendations
  - Work with ASLD on Conceptual Plan
  - Work with Pinal County on Comprehensive Plan Amendment
  - Advocacy
  - Future Challenges
    Infrastructure Financing
    Water/Energy Issues
    Governance
Consider how to make Superstition Vistas one of the most sustainable communities in the country by balancing environment, economy, and community.
Lessons Learned

- Mixed-use Centers
- Triple Bottom Line
- Vibrant Economy
- Full Spectrum of Housing
- Build Green, Promote Auto Efficiency
- Connectivity to Region & Super-Region
Next Steps

- Assist in preparation of State Conceptual Plan and Pinal County Comprehensive Plan amendment
- Continue to monitor State Trust Land Reform activities
- Prepare a plan for developing and paying for infrastructure including transportation, wastewater, drainage
- Explore governance issues
- Development of a plan to provide needed water to the project area
- Keeping the vision of this project on political and community leaders “front burner”
Conceptual Plan Process

Data Gathering & Site Analysis

Meet with Local Jurisdiction to review & confirm info

Develop 3 Land Use Alternatives for Review by Commissioner/ULPOC*

Final Alternative Prepared

Integration into Community General Plan Via Community Initiated General Plan Amendment

Commissioner Order Adopting Conceptual Plan

*ULPOC - Urban Lands Planning Oversight Committee
Open Space and Trails

Note:

1. The Pinal County Comprehensive Plan is a design tool for planning development in the unincorporated area of the county. It is not intended to regulate land use or development. The Comprehensive Plan is a living document and is subject to change as the county grows and developments are completed.

2. It is important that developers and builders work with the planning department to ensure that developments are in compliance with the Comprehensive Plan.

3. The Pinal County Open Space and Trails Master Plan (adopted 2017) is an important component of this effort to protect the open spaces.

Outreach

• Committee included elected and appointed officials
• Cities and towns and two counties in the region
• Presentations were given at council meetings
• Presentation at Pinal County Alliance
• Web site continually updated
• Booklets were printed and extensively distributed
• Articles in the newspapers with wide coverage
• Well attended interactive meetings Gold Canyon and Florence
• Hearing at the Comprehensive plan stage
Issues at Hearings

• Committee Issues
• Density
• Water
• State Land constitutional constraints
• Transportation funding
• Private vs. State Land
• Governance
• Zoning vs. visioning
• 50 year plan – why do it now?