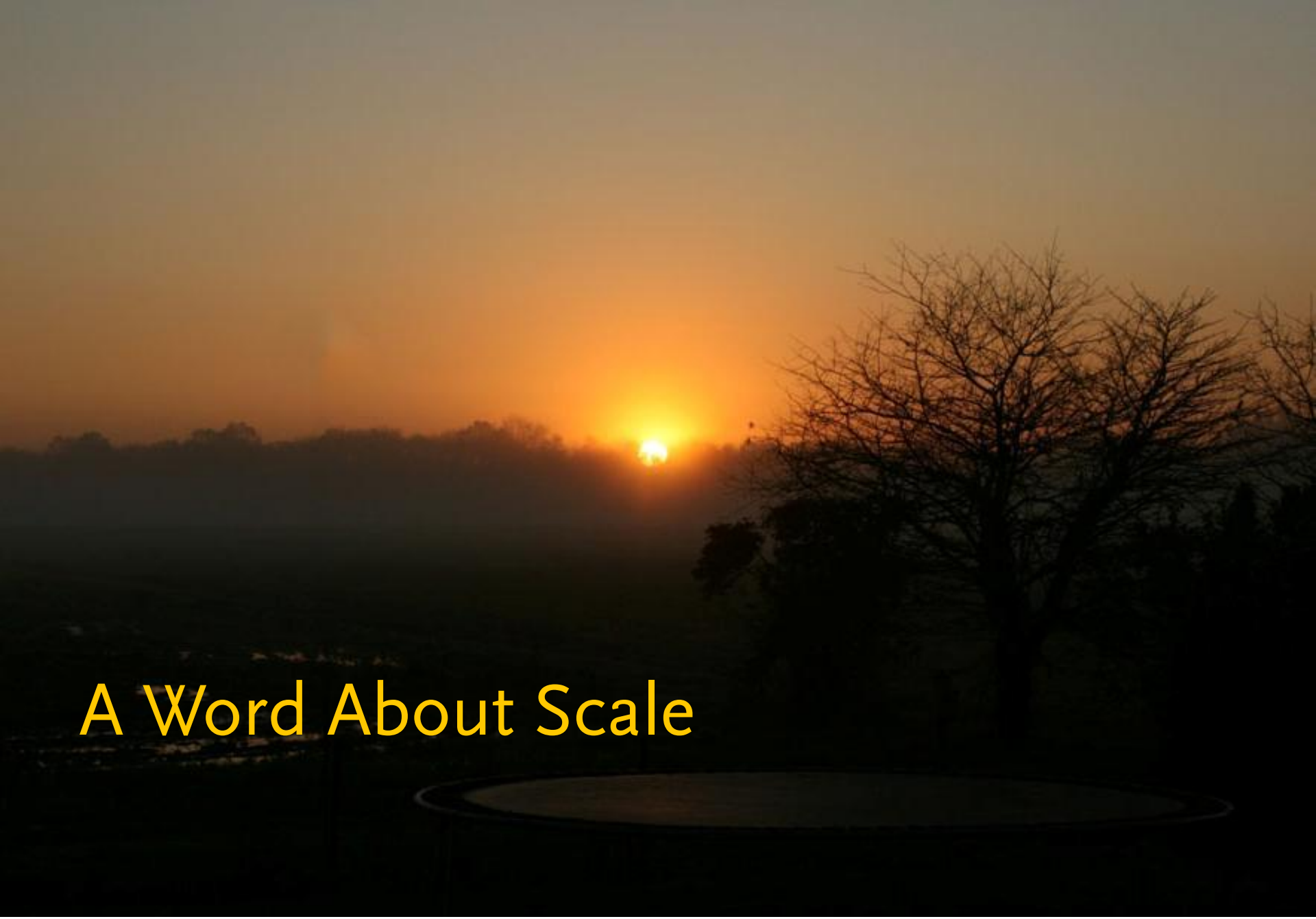
The Good

The Bad

The Ugly



A Word About Scale

Solar Scale

Photos provided by Sun Farm Network, Inc.


Residential Scale
Average home 6kW
Solar Scale


Farm Scale
Up to 2MW or 10 ac.
Solar Scale

Janssen Pharmaceuticals 4.1MWp Tracker

Titusville, NJ

Photo Courtesy of Sun Power Corp.

Florida Power & Light
27.6MWp Tracker
Arcadia, FL

Legal Aspects of Grid Scale Solar Applications

- Statutory Changes
- Case Law
- 'Sica' Balancing Test
- Conditions

Trishka Waterbury, Esq.

Municipal Challenges for Managing Solar Facilities

- Master Plan Policy
- Ordinances
- Site Plan/ Variances
- Negative Impacts
- Case Studies
- Mitigation

Lisa Y. Specca PP, AICP

- MLUL purpose: to promote utilization of renewable energy. *NJSA 40:55D-2 n*
- Most Master Plans include unspecific language supporting alternative energy

Master Plan Policy

Policy Considerations:

Grid Scale Solar Facilities

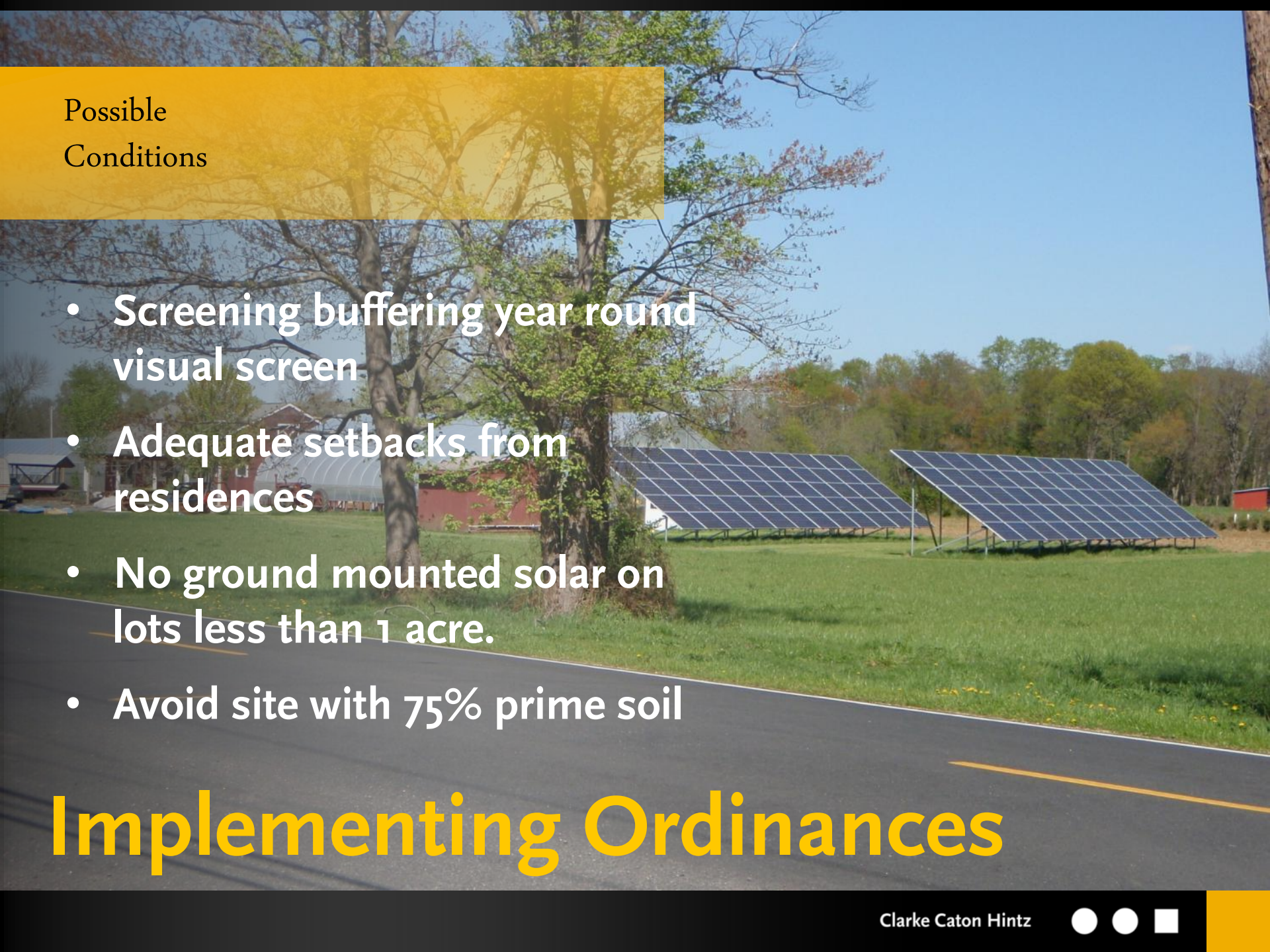
- Parcels with less than 75% Prime Agricultural Soils
- Not adjacent to Preserved Farmland/ Open Space
- Perimeter setbacks and planting to achieve year round visual screen

Master Plan Policy

Barriers to Adoption of Ordinances

- Lack of Experience/ Misinformation
- No Established Standards
- Concerned Citizens
- Permitted or Conditional Uses Difficult to Deny

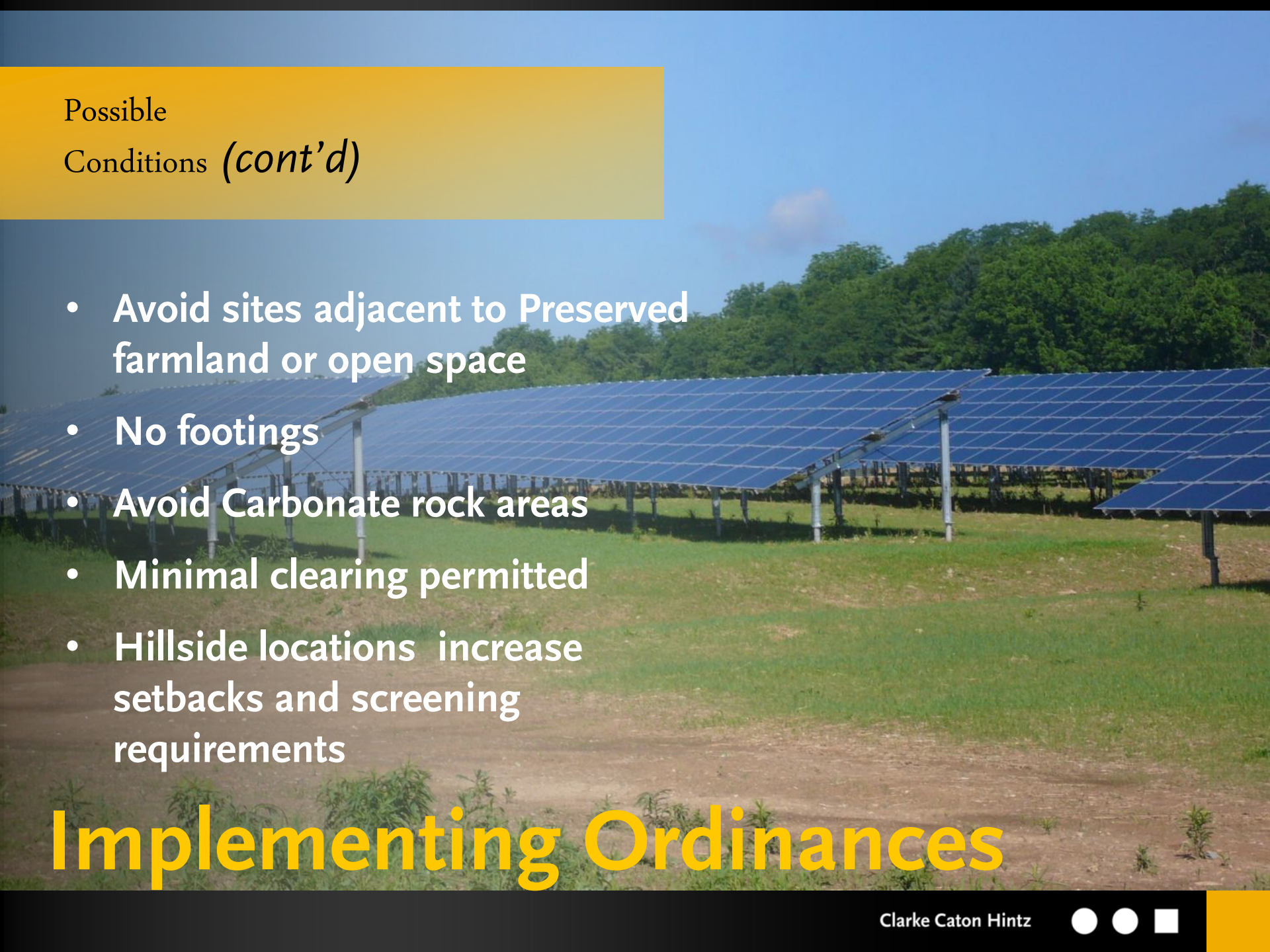
Implementing Ordinances



Possible
Conditions

- Screening buffering year round visual screen
- Adequate setbacks from residences
- No ground mounted solar on lots less than 1 acre.
- Avoid site with 75% prime soil

Implementing Ordinances



Possible Conditions *(cont'd)*

- Avoid sites adjacent to Preserved farmland or open space
- No footings
- Avoid Carbonate rock areas
- Minimal clearing permitted
- Hillside locations increase setbacks and screening requirements

Implementing Ordinances

"D" Variances

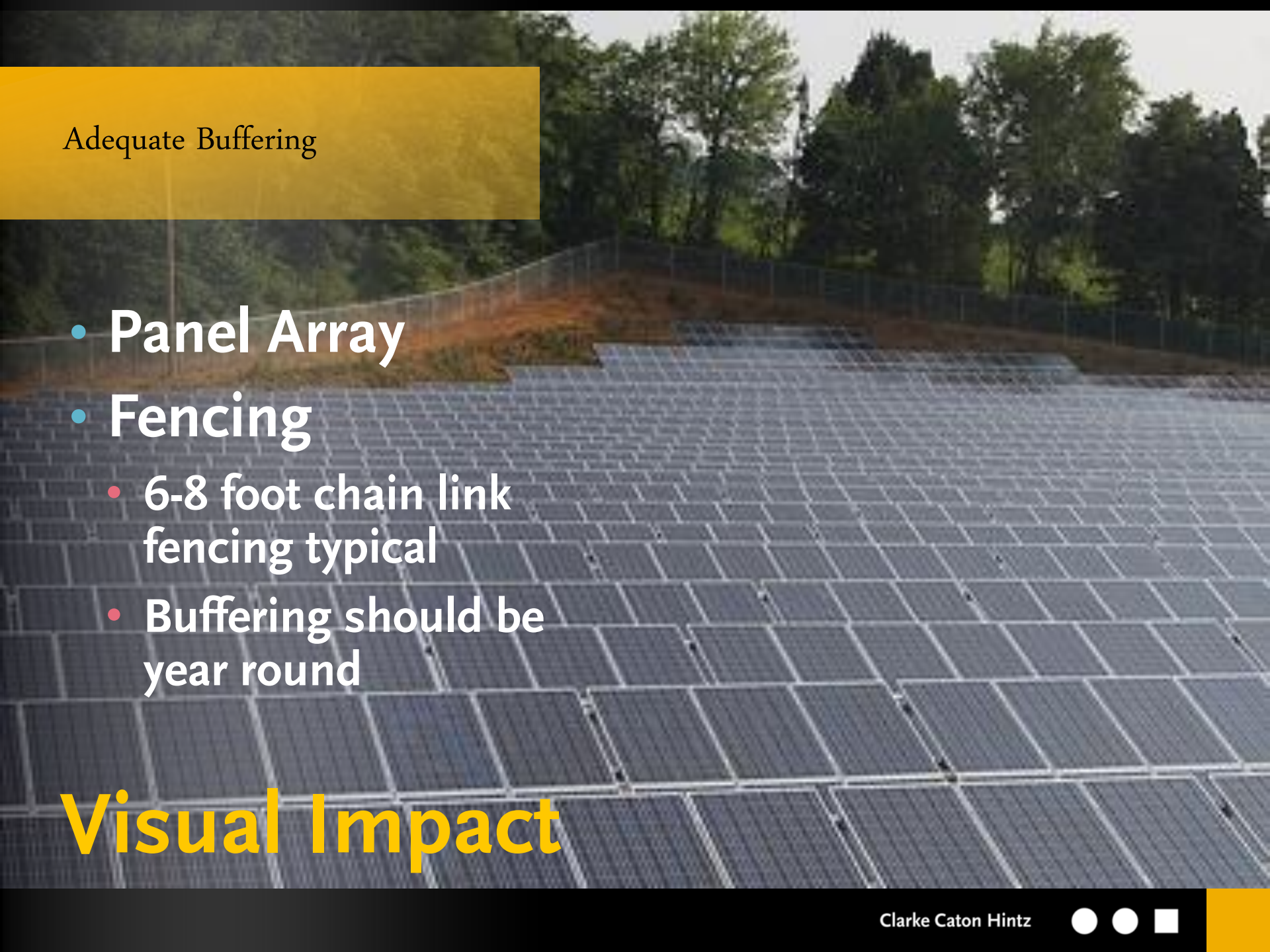
- ***Strongly*** Recommend Against "Bifurcating"
- Site plan details critical to impact assessment
- Don't Allow Applicant To "Rush"

Site Plan & Variance Approval

Adequate Screening

- Neighboring Residential Uses
- Roadside Vistas
- Historic Areas
- Scenic Areas
- Glare
- Substations
- Wiring

Visual Impact



Adequate Buffering

- Panel Array
- Fencing
  - 6-8 foot chain link fencing typical
  - Buffering should be year round

Visual Impact

Adequate Buffering

- Inverters

- 8-10 feet height
- 15-20 feet in depth
- 1-2 Inverters for every MW
- Emit humming noise
- Adequate setbacks- 300-500 feet

Noise Impact

Avoid Important Scenic Vistas

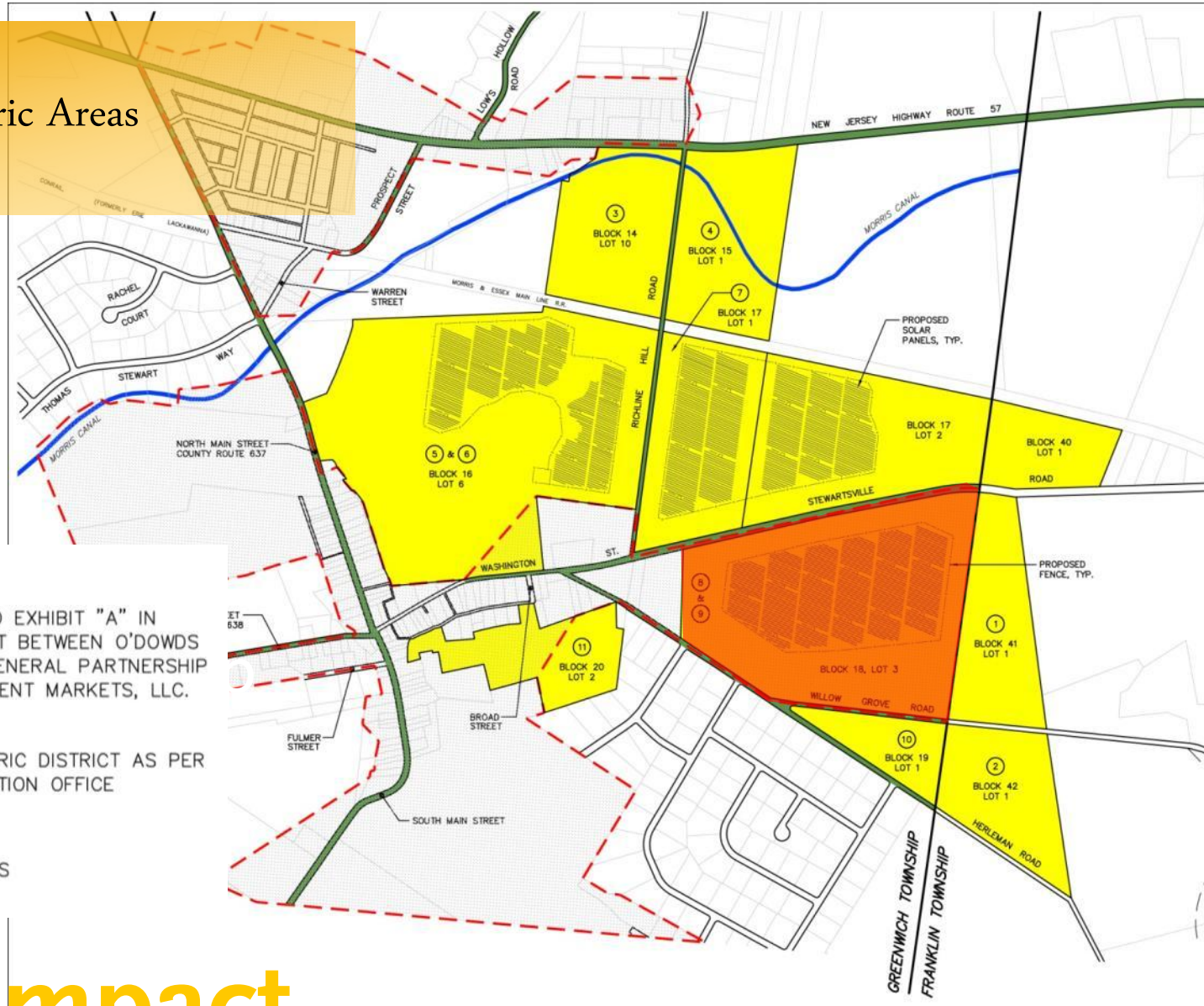
Visual Impact


Consider views from neighbors
Visual Impact

Reflection

Visual Impact

Avoid Scenic/Historic Areas



LEGEND

- (1) TRACT NUMBER ACCORDING TO EXHIBIT "A" IN GROUND LEASE AND EASEMENT BETWEEN O'DOWDS ASSOCIATES A NEW JERSEY GENERAL PARTNERSHIP AND BRIAN O'DOWD AND ELEMENT MARKETS, LLC.
- STEWARTSVILLE VILLAGE HISTORIC DISTRICT AS PER NJ STATE HISTORIC PRESERVATION OFFICE
- SCENIC BYWAY AND CORRIDORS

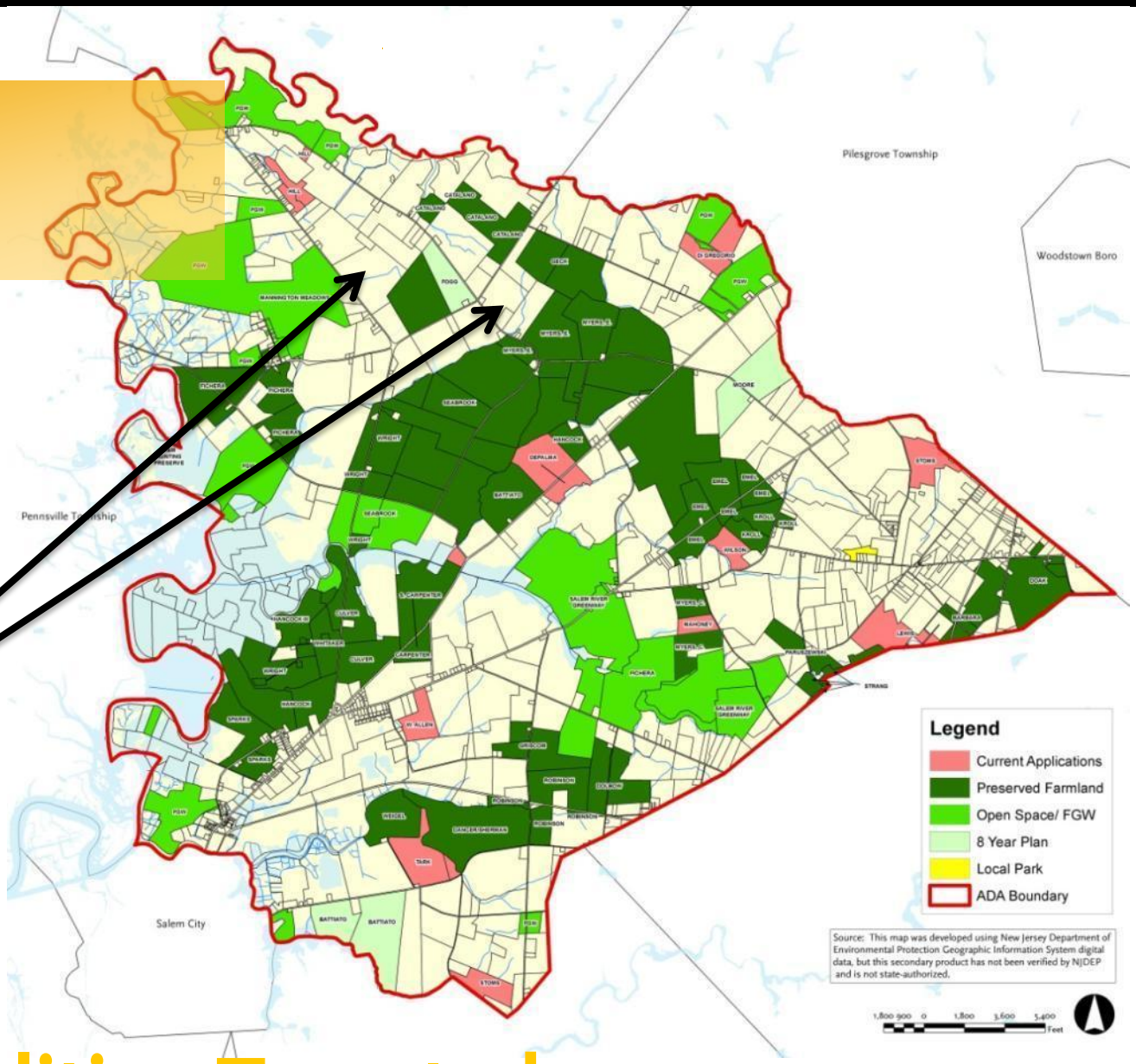
Visual Impact

Photo Courtesy of Finelli Consulting Engineers

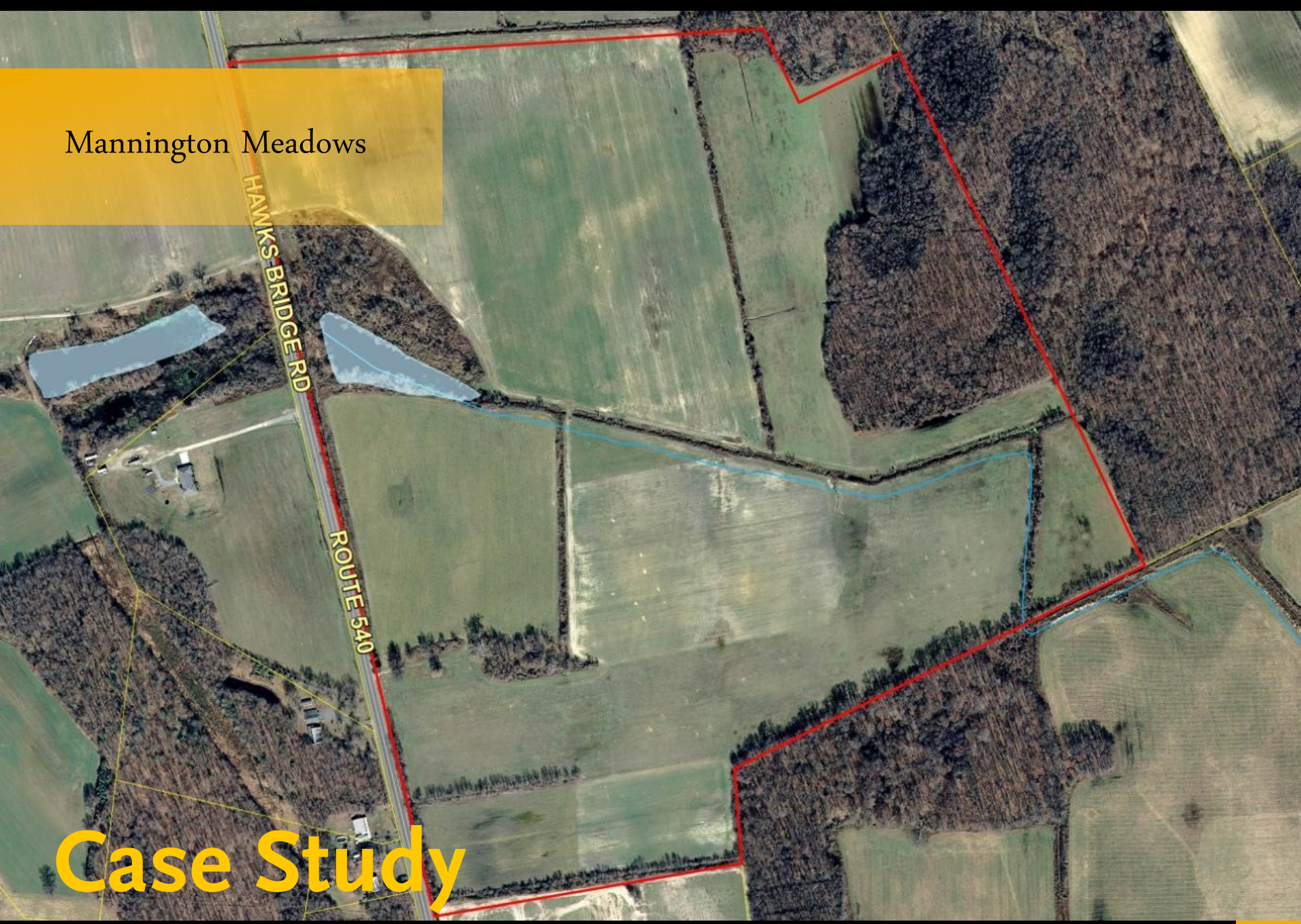

Energy
Farmland
Habitat
Balancing Competing Public Purposes
Case Study: Mannington Twp.

Mannington Township

Salem County



NJ Municipalities Targeted



Mannington Meadows

Case Study

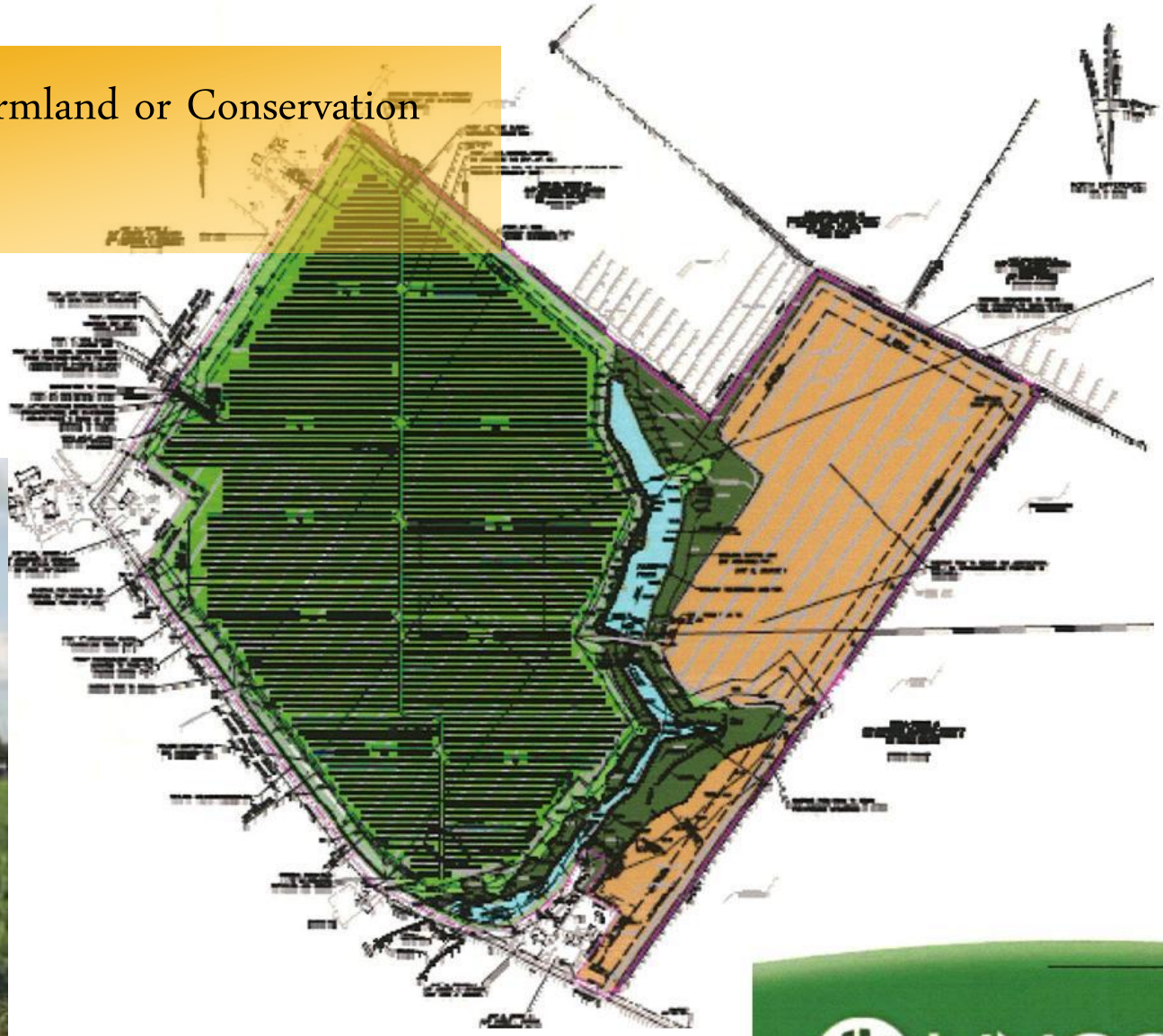
Mannington Meadows Solar

Case Study

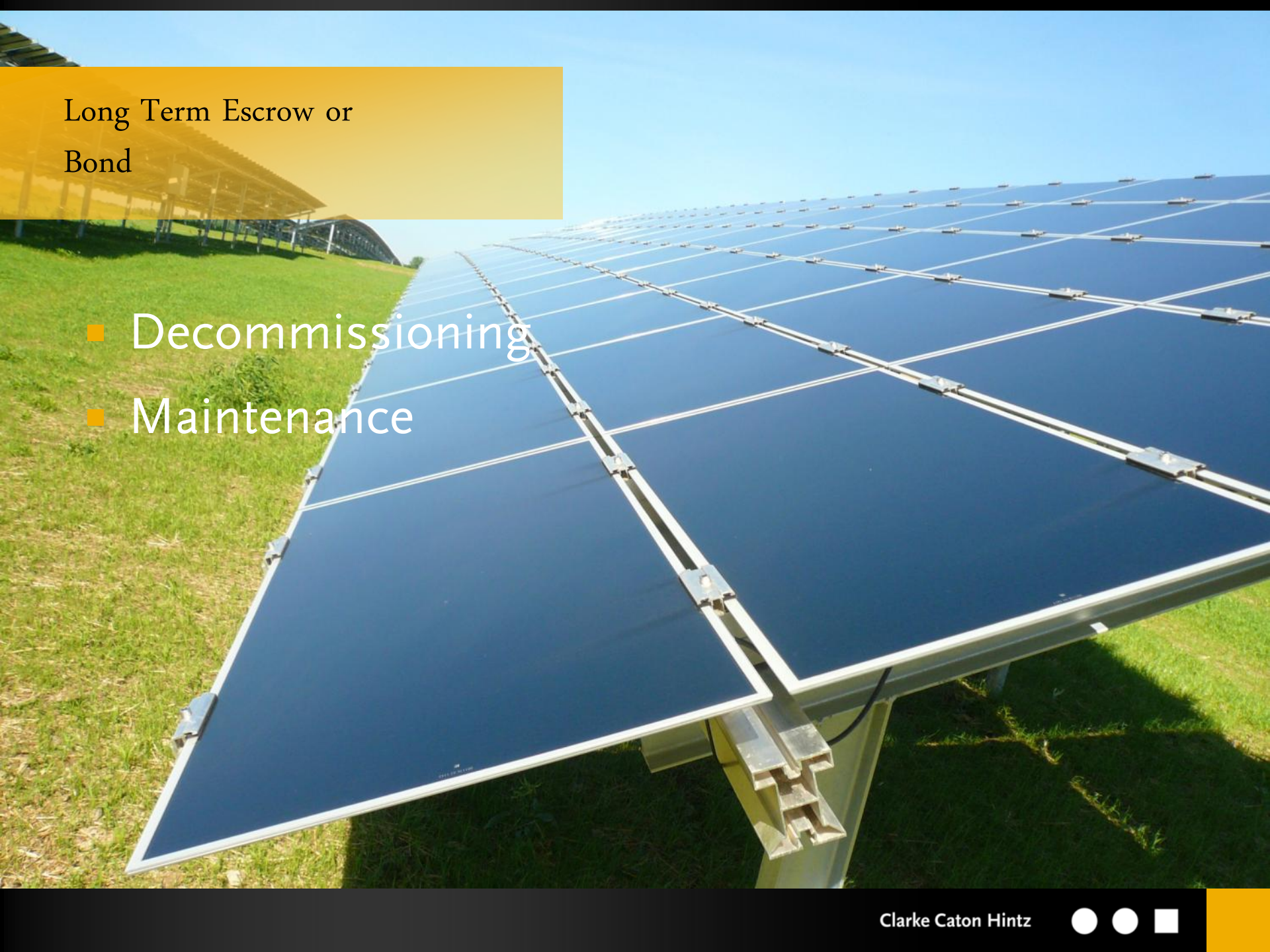

Buffers and Setbacks
Mitigation Techniques
Clarke Caton Hintz

Meadow Grass Habitat

Donation of Farmland or Conservation Easements



LINCOLN
RENEWABLE ENERGY, LLC



Long Term Escrow or Bond

- Decommissioning
- Maintenance

Taxation

- Roll Back Taxes- 3 years
- Real Property Taxed as Industrial Use
- Portion of the Array taxed

Taxation

- Manning ton Example $147,000 per year
- Guidance from State Dept of Treasury pending
- ***Local tax assessor must make determination***


Thank You!