

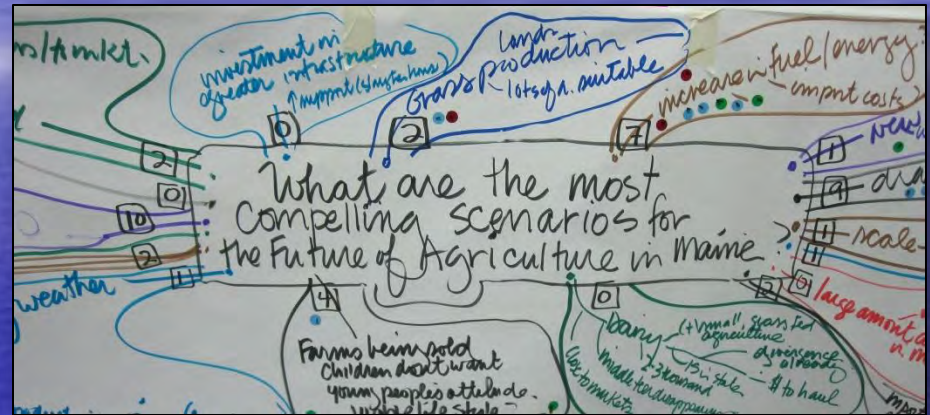
Strategic Conservation

- What do we want to protect?
- Why do we want to protect it?
- Where should we focus our efforts?
- How do we enact protection?
- Who are the “players” in realizing the vision?
- How do we ensure endurance & evaluate success?



Modeling with the Experts

- 80 participants in 8 focus groups & 2 all-stakeholder workshops

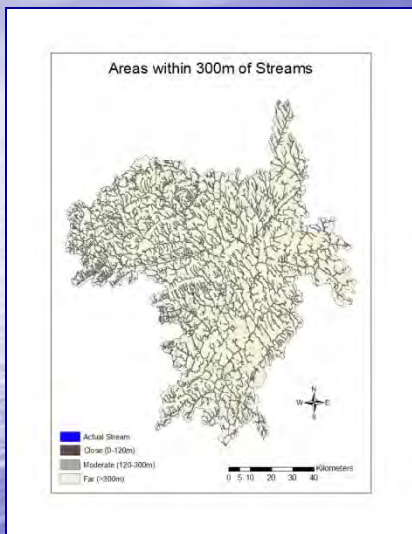


- Land Use Sectors:
 - Forestry
 - Conservation
 - Agriculture
 - Development

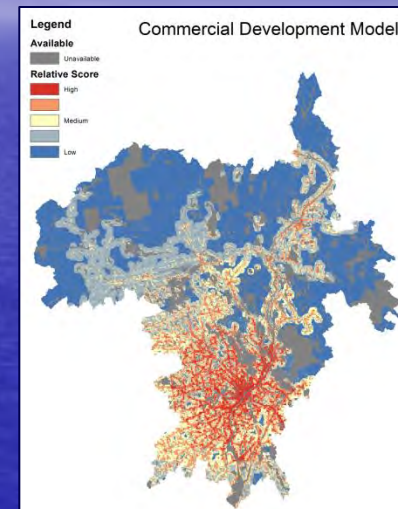


Bayesian Network Modeling Process

Begin with spatial data...



Development suitability map



Conceptual model based on expert opinion that identifies important landscape features...



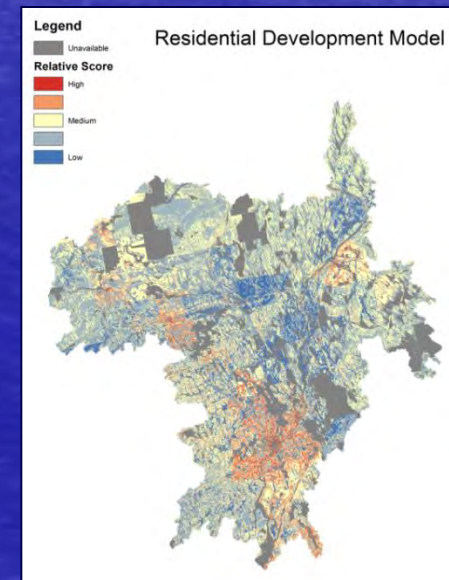
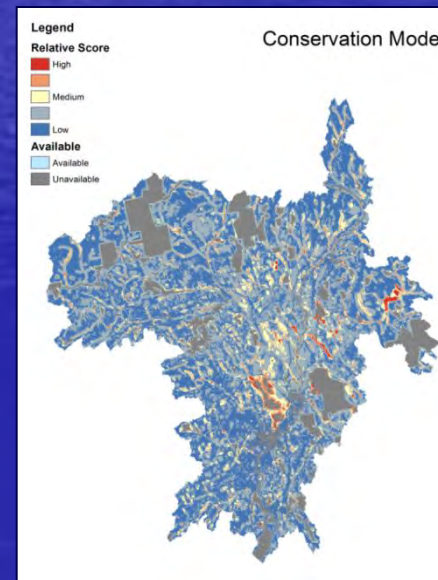
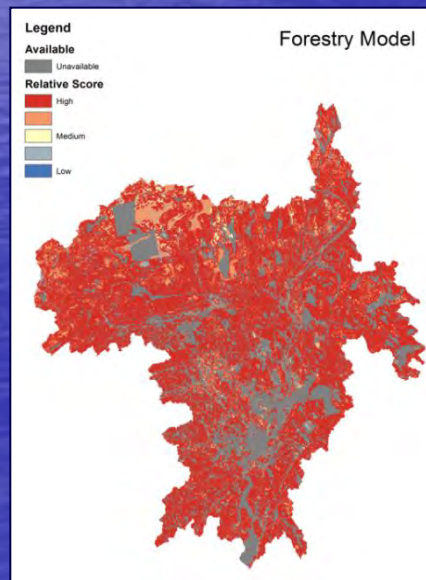
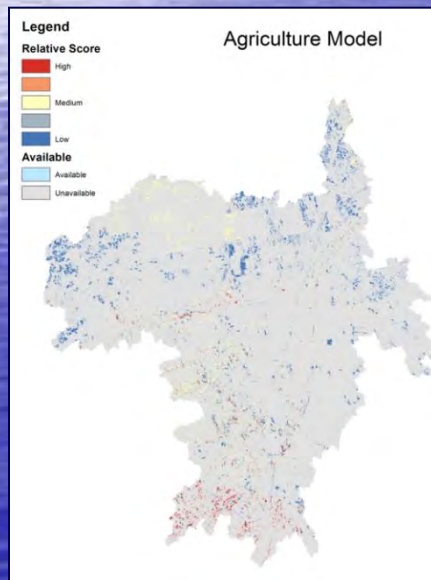
Agriculture

Forestry

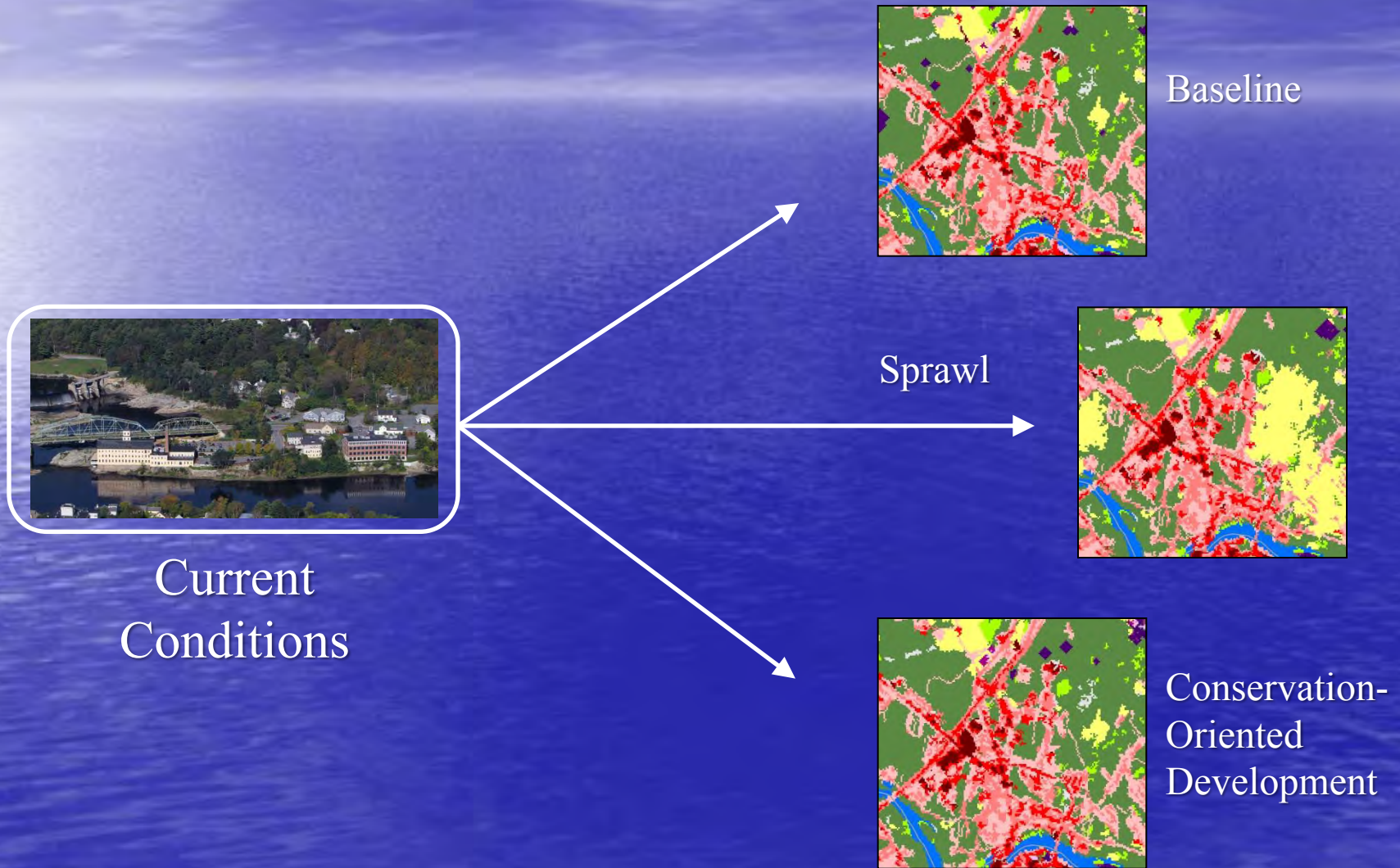
Conservation

Development

Stakeholder-based
Suitability Models



Alternative Land Use Futures



Linking Knowledge to Action...

Preserving Paradise

A 30-minute MPBN TV documentary was first broadcast in October 2013



Preserving Paradise

Maine's landscape has been steadily changing. Houses, developments, and malls are sprouting up in places where crops once grew, cows grazed, rivers flowed unchecked and forests thrived. Development can bring much needed social and economic benefits, but when it happens without forethought, there may be the risk of adverse long-term consequences. So what does the future hold, and are there alternatives? Join a team of Maine EPSCoR SSI researchers at the University of Maine as they explore the answers to these questions.

[Additional Podcasts](#)

 THE UNIVERSITY OF MAINE

Meet the Researchers

- [Rob Lillahlom](#)
- [Chris Cronan](#)
- [Dave Owen](#)
- [Michelle Johnson](#)
- [Spencer Meyer](#)
- [Thomas Parr](#)

SSI Partner links

- [Verso Paper](#)
- [Town of Falmouth](#)
- [Fisher Farm](#)
- [Maine Audubon](#)

[Visit Maine's Sustainability Solutions Initiative website](#)

Maine Futures Community Mapper

On-line website allows stakeholders to:

- *Explore land use suitabilities*
- *Identify potential conflicts & opportunities*
- *Evaluate future land use scenarios*





WHAT IS THE MAINE FUTURES COMMUNITY MAPPER?

Envision tomorrow's landscape today

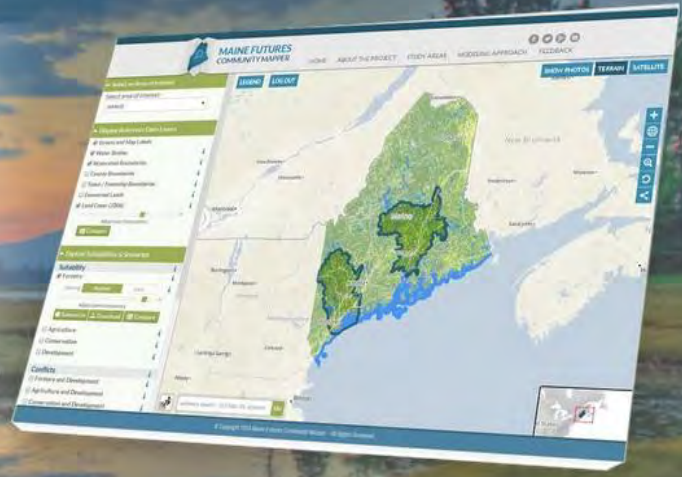
- ✓ This interactive mapping tool allows you to examine current and future land use in your town, region, and watershed.

Developed with input from people like you

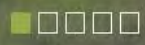
- ✓ The Mapper was developed with a diverse group of stakeholders representing conservation, economic development, forestry, and agriculture in Maine.

Built for planners and citizens

- ✓ The Mapper provides individuals and communities with new ways of looking at their towns and landscapes to help improve their land use decisions.



Launch Mapper »

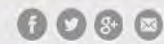


Exploring Maine's Future Under Alternative Land Use Scenarios

A planning tool for communities, businesses and citizens



MAINE FUTURES COMMUNITY MAPPER



SHOW PHOTOS TERRAIN SATELLITE

Select an Area of Interest

Select area of interest:

(select)

Current selection:

Bangor, Brewer, Eddington, Glenburn, Hampden, Hermon, Holden, Old Town, Orono, Orrington, Winterport

[Download Area Report](#)

Display Reference Data Layers

- Streets and Map Labels
 - Water Bodies
 - Watershed Boundaries
 - Adjust layer transparency
 - County Boundaries
 - Town / Township Boundaries
 - Adjust layer transparency
 - Conserved Lands
 - Land Cover (2006)
 - Adjust layer transparency
- [Compare](#)

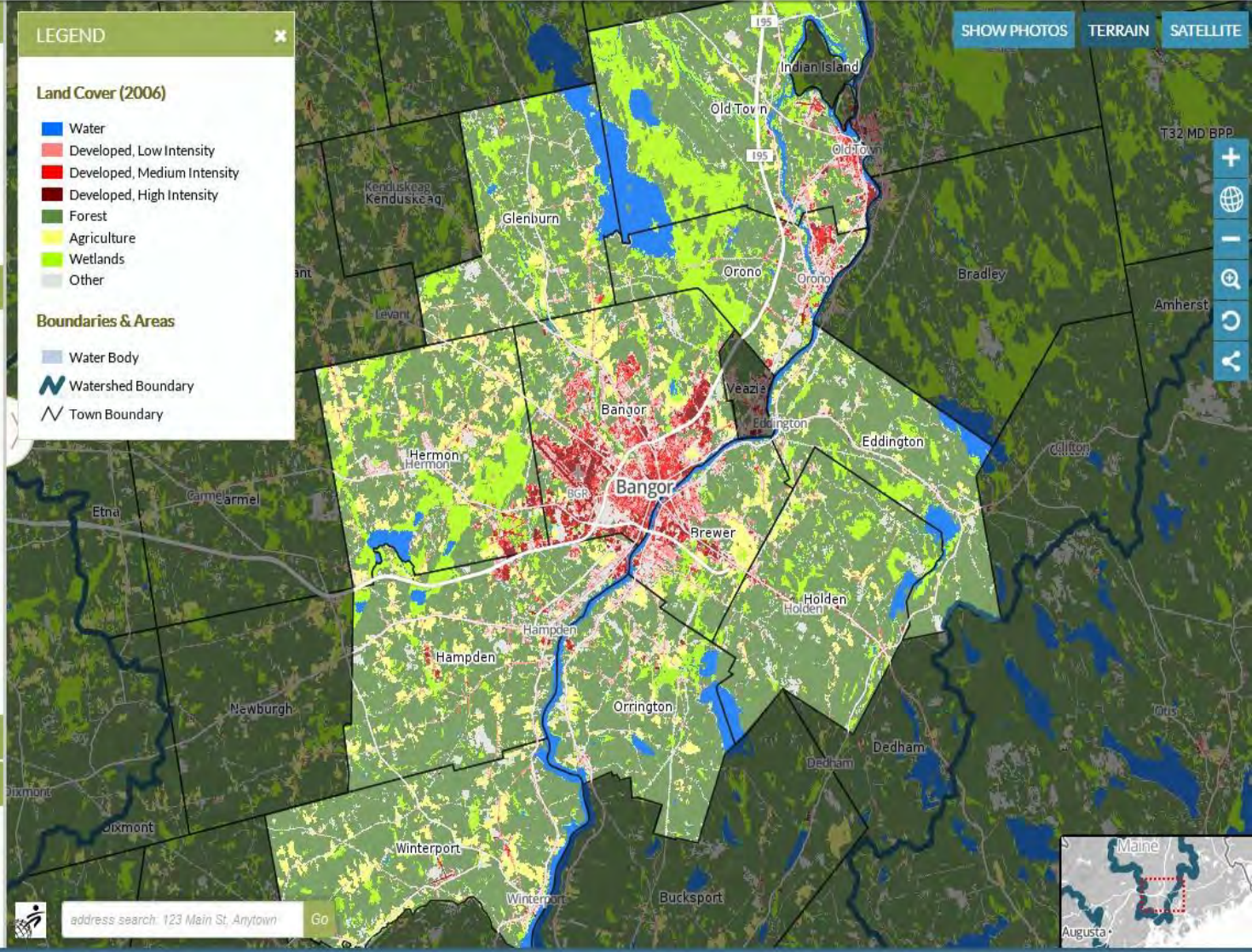
LEGEND

Land Cover (2006)

- Water
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, High Intensity
- Forest
- Agriculture
- Wetlands
- Other

Boundaries & Areas

- Water Body
- Watershed Boundary
- Town Boundary

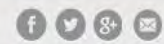


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MAINE FUTURES COMMUNITY MAPPER



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Display Reference Data Layers

Explore Suitabilities & Scenarios

Suitability

- Forestry
- Agriculture
- Conservation

Scoring: Regional Local

Adjust layer transparency

Summarize Download Compare

Development

Conflicts

- Forestry and Development
- Agriculture and Development
- Conservation and Development

Opportunities

- Forestry and Conservation
- Agriculture and Conservation
- Development Without Conflicts

Scenarios

- 2006 Conditions (Reference)

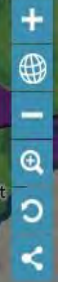
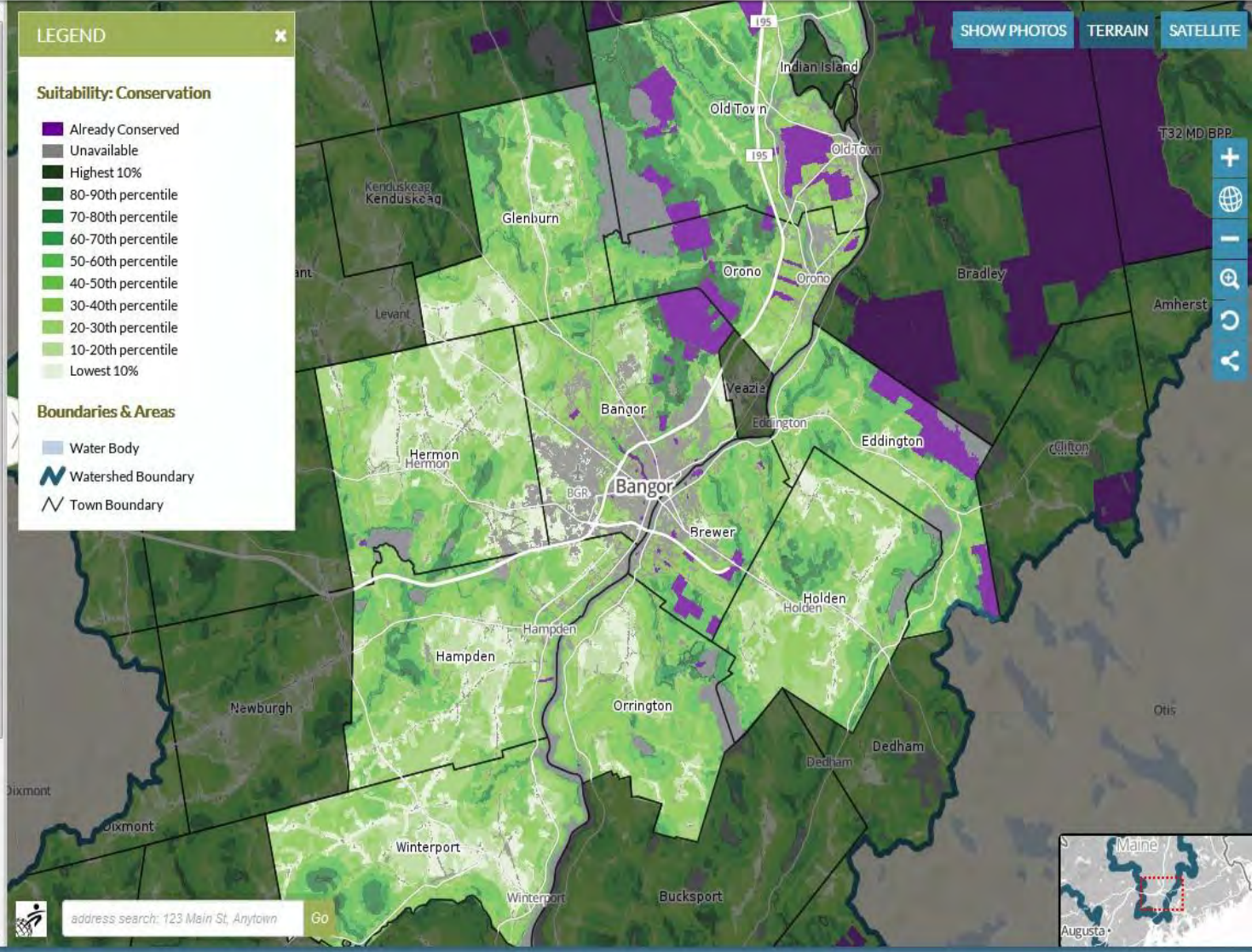
LEGEND

Suitability: Conservation

- Already Conserved
- Unavailable
- Highest 10%
- 80-90th percentile
- 70-80th percentile
- 60-70th percentile
- 50-60th percentile
- 40-50th percentile
- 30-40th percentile
- 20-30th percentile
- 10-20th percentile
- Lowest 10%

Boundaries & Areas

- Water Body
- Watershed Boundary
- Town Boundary



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MAINE FUTURES COMMUNITY MAPPER

HOME ABOUT THE PROJECT STUDY AREAS MODELING APPROACH FEEDBACK



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Display Reference Data Layers

Explore Suitabilities & Scenarios

Suitability

- Forestry
- Agriculture

Scoring: **Regional** Local

Adjust layer transparency

[Summarize](#) [Download](#) [Compare](#)

Conservation

Development

Conflicts

- Forestry and Development
- Agriculture and Development
- Conservation and Development

Opportunities

- Forestry and Conservation
- Agriculture and Conservation
- Development Without Conflicts

Scenarios

- 2006 Conditions (Reference)

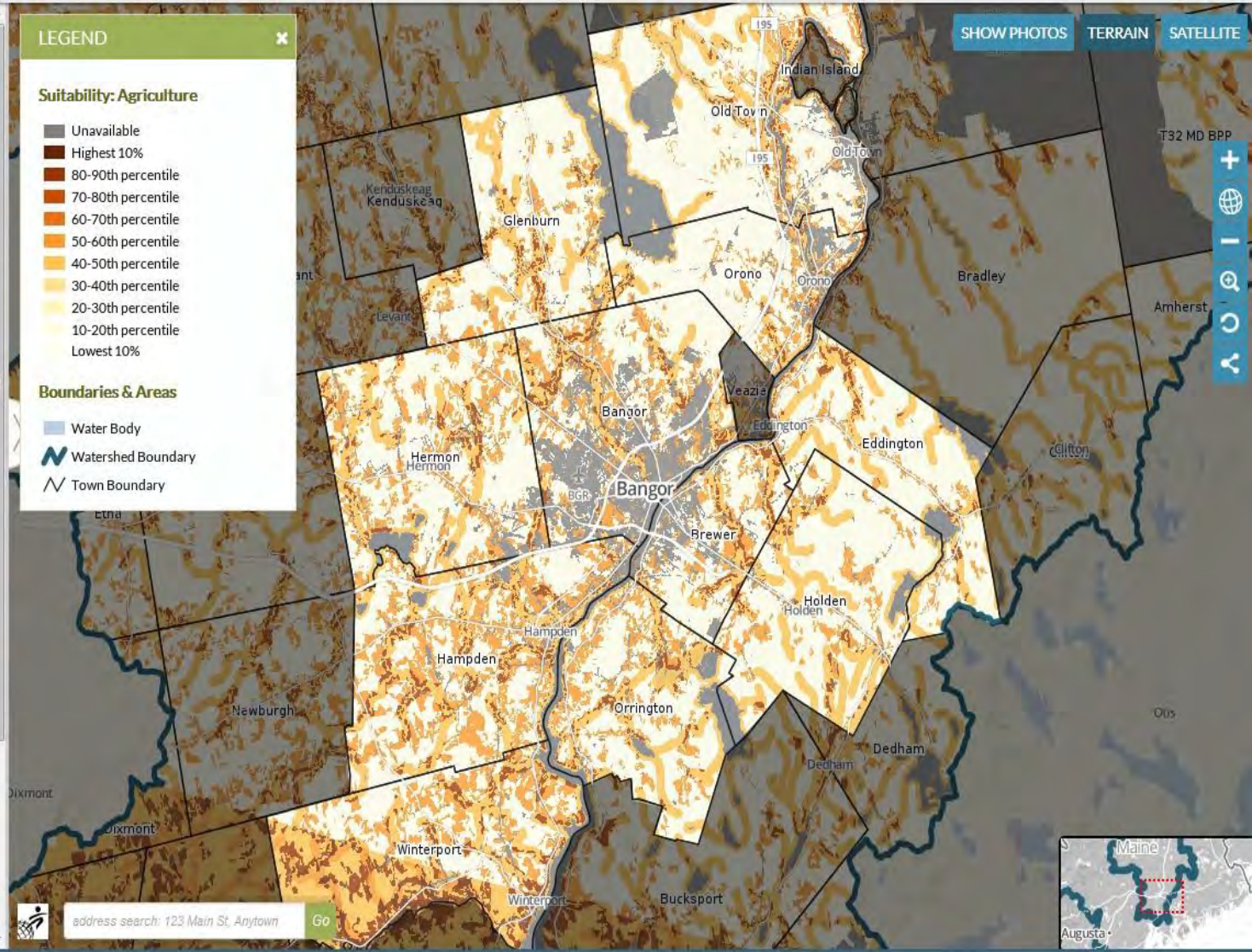
LEGEND

Suitability: Agriculture

- Unavailable
- Highest 10%
- 80-90th percentile
- 70-80th percentile
- 60-70th percentile
- 50-60th percentile
- 40-50th percentile
- 30-40th percentile
- 20-30th percentile
- 10-20th percentile
- Lowest 10%

Boundaries & Areas

- Water Body
- Watershed Boundary
- Town Boundary



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MAINE FUTURES COMMUNITY MAPPER



SHOW PHOTOS TERRAIN SATELLITE

Select an Area of Interest

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Display Reference Data Layers

Explore Suitabilities & Scenarios

Suitability

- Forestry
- Agriculture
- Conservation
- Development

Scoring: Regional Local
Adjust layer transparency
Summarize Download Compare

Conflicts

- Forestry and Development
- Agriculture and Development
- Conservation and Development

Opportunities

- Forestry and Conservation
- Agriculture and Conservation
- Development Without Conflicts

Scenarios

- 2006 Conditions (Reference)

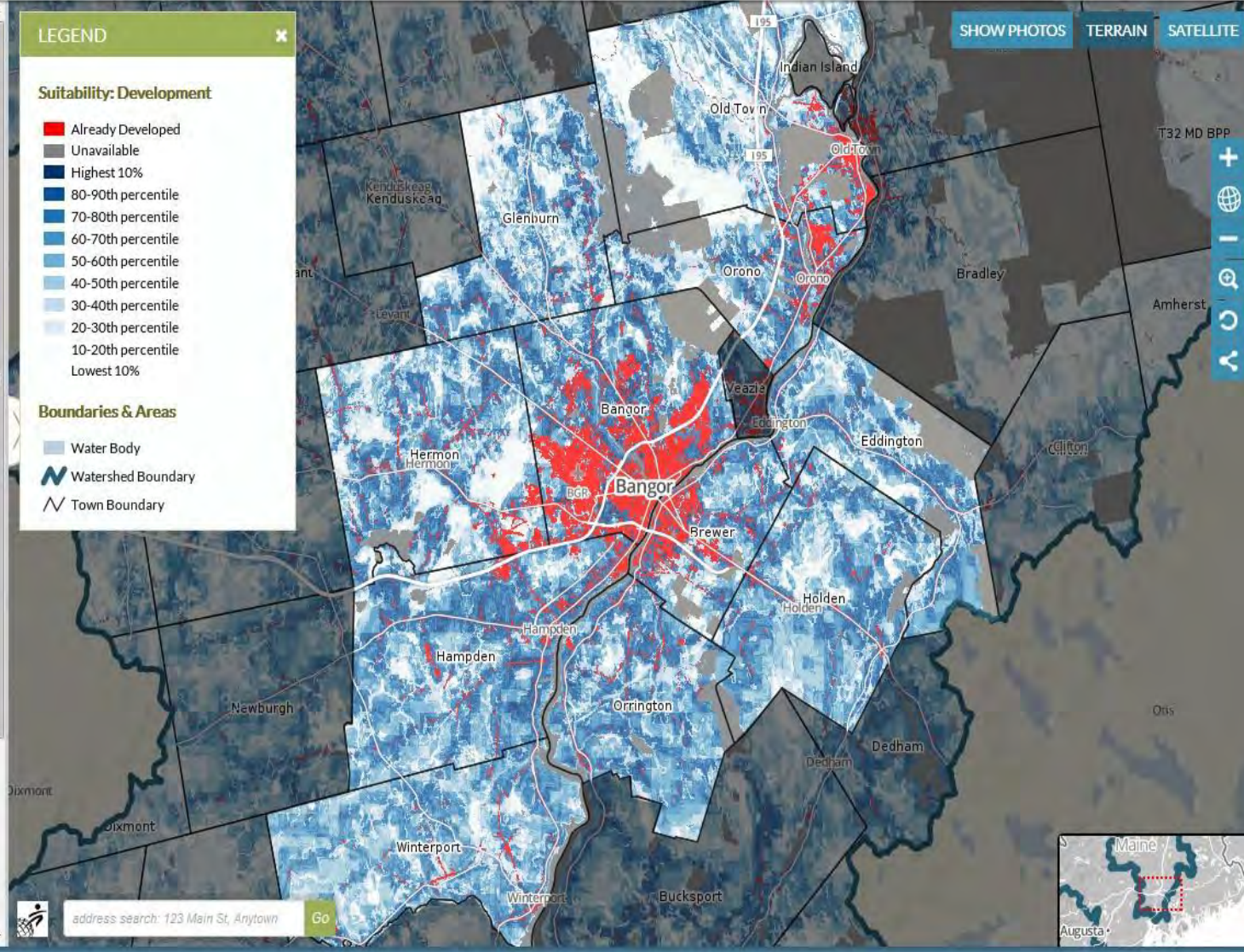
LEGEND

Suitability: Development

- Already Developed
- Unavailable
- Highest 10%
- 80-90th percentile
- 70-80th percentile
- 60-70th percentile
- 50-60th percentile
- 40-50th percentile
- 30-40th percentile
- 20-30th percentile
- 10-20th percentile
- Lowest 10%

Boundaries & Areas

- Water Body
- Watershed Boundary
- Town Boundary



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MAINE FUTURES COMMUNITY MAPPER



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Display Reference Data Layers

Explore Suitabilities & Scenarios

Suitability

- Forestry
- Agriculture
- Conservation
- Development

Conflicts

- Forestry and Development
- Agriculture and Development
- Conservation and Development

Adjust layer transparency

[Summarize](#) [Download](#) [Compare](#)

Opportunities

- Forestry and Conservation
- Agriculture and Conservation
- Development Without Conflicts

Scenarios

- 2006 Conditions (Reference)
- Continued Current Conditions
- A1
- A2
- B1

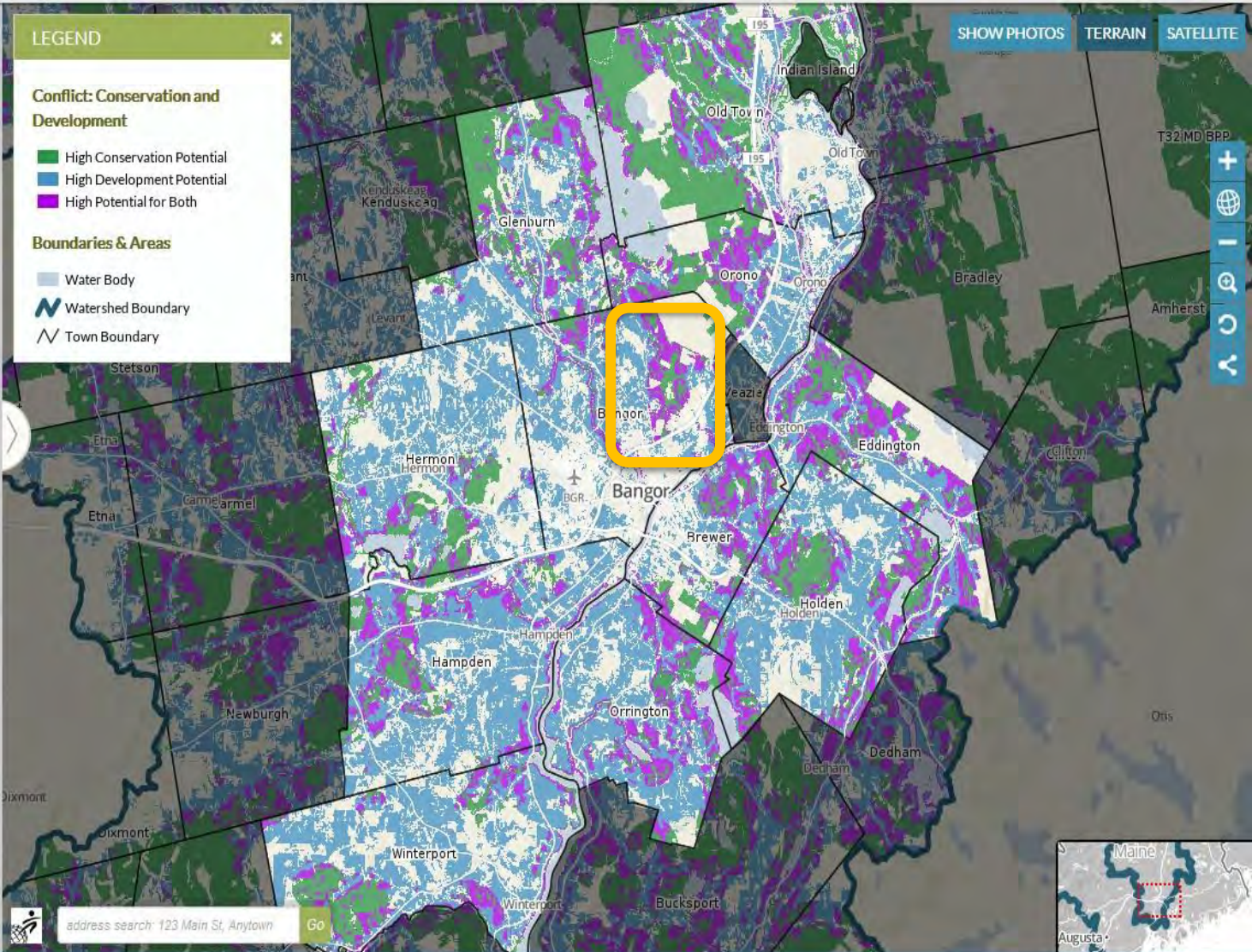
LEGEND

Conflict: Conservation and Development

- High Conservation Potential
- High Development Potential
- High Potential for Both

Boundaries & Areas

- Water Body
- Watershed Boundary
- Town Boundary



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Display Reference Data Layers

Explore Suitabilities & Scenarios

Suitability

- Forestry
- Agriculture
- Conservation
- Development

Conflicts

- Forestry and Development
- Agriculture and Development
- Conservation and Development

Adjust layer transparency

Summarize Download Compare

Opportunities

- Forestry and Conservation
- Agriculture and Conservation
- Development Without Conflicts

Scenarios

- 2006 Conditions (Reference)
- Continued Current Conditions
- A1
- A2
- B1

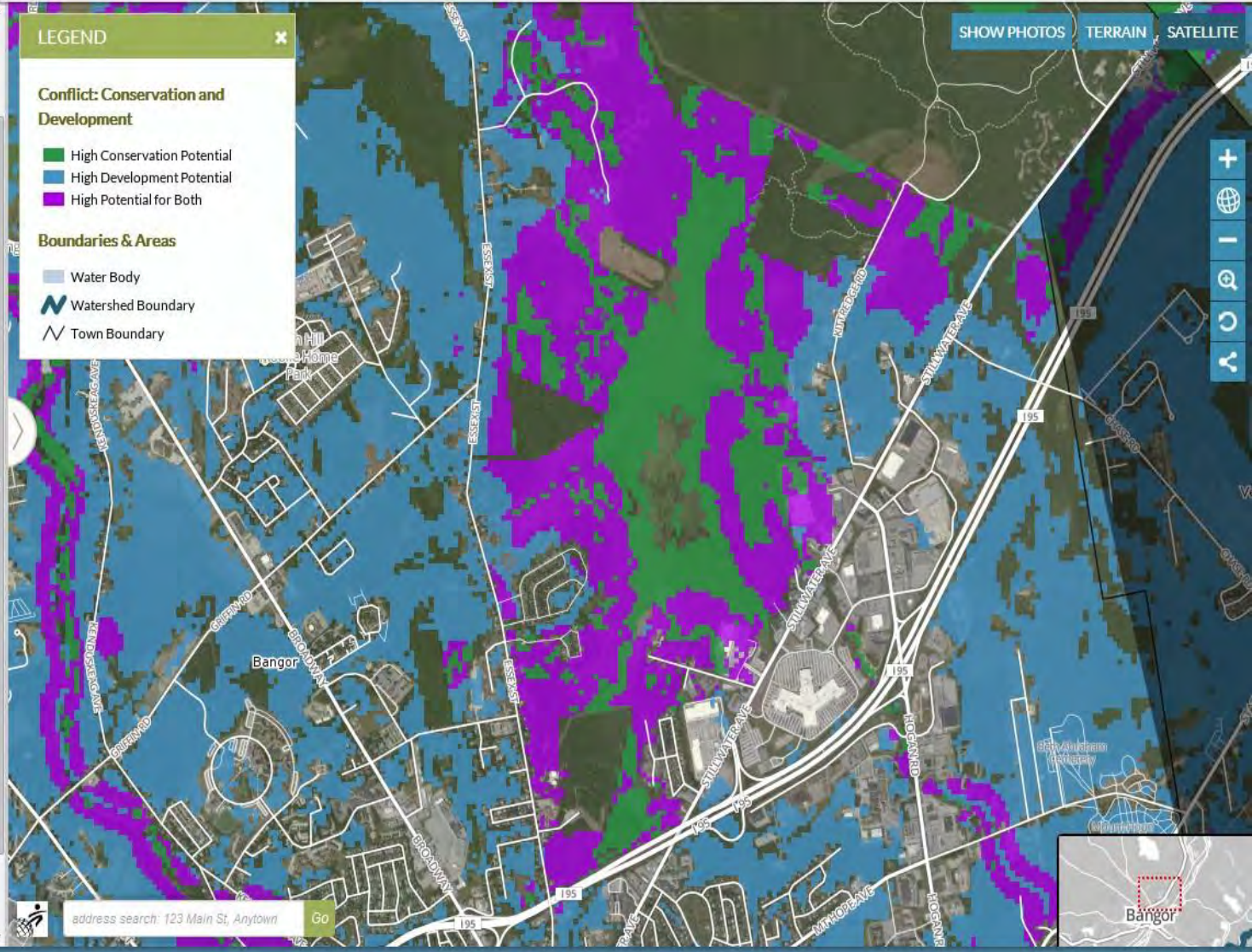
LEGEND

Conflict: Conservation and Development

- High Conservation Potential
- High Development Potential
- High Potential for Both

Boundaries & Areas

- Water Body
- Watershed Boundary
- Town Boundary



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SHOW PHOTOS TERRAIN SATELLITE

Select an Area of Interest

Select area of interest:
(select) [dropdown arrow]

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Display Reference Data Layers

Explore Suitabilities & Scenarios

Suitability

- Forestry
- Agriculture
- Conservation
- Development

Conflicts

- Forestry and Development
- Agriculture and Development
- Conservation and Development

Opportunities

- Forestry and Conservation
- Agriculture and Conservation

Adjust layer transparency

[Summarize](#) [Download](#) [Compare](#)

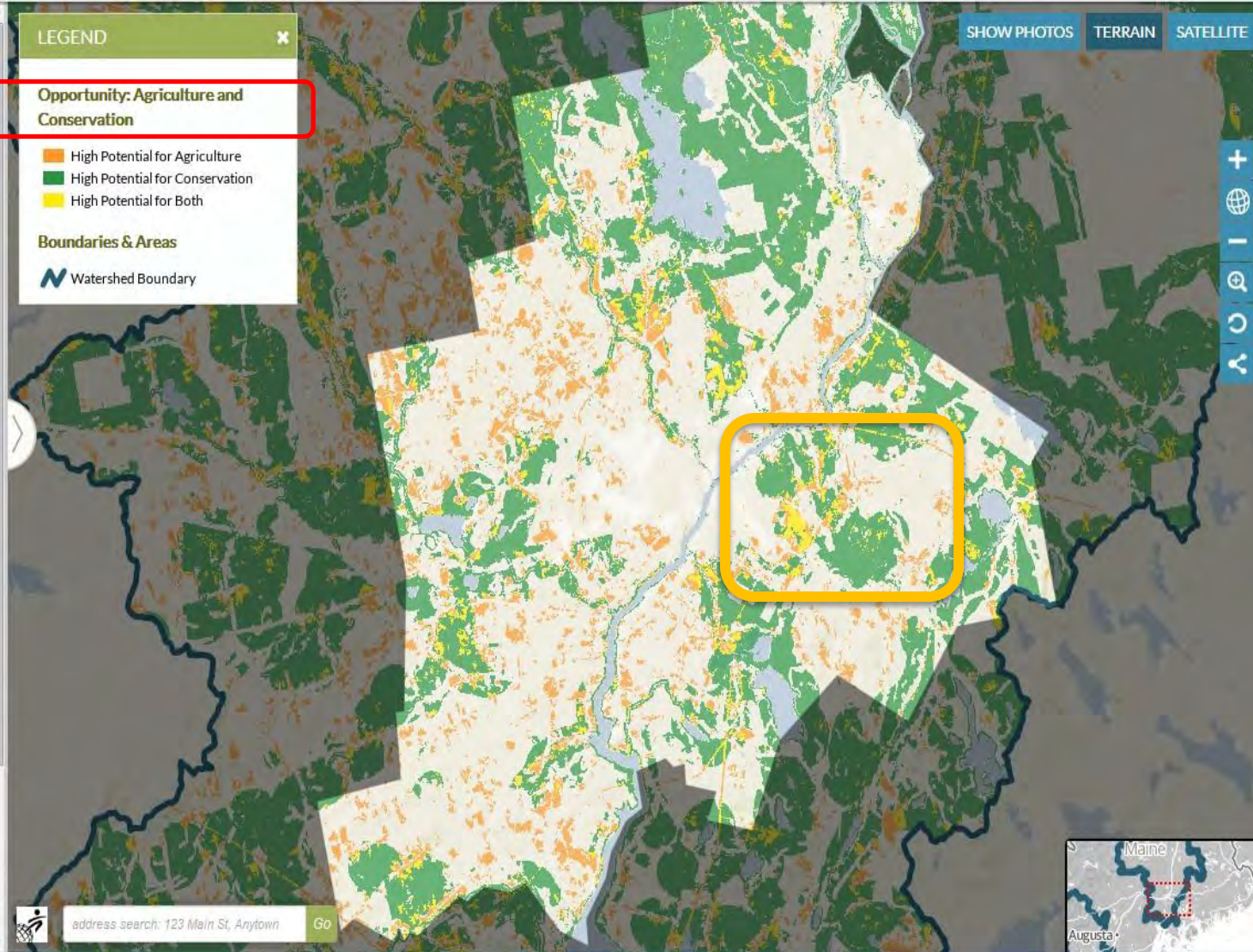
Development Without Conflicts

Scenarios

- 2006 Conditions (Reference)
- Continued Current Conditions

LEGEND

- Opportunity: Agriculture and Conservation**
 - High Potential for Agriculture
 - High Potential for Conservation
 - High Potential for Both
- Boundaries & Areas**
 - Watershed Boundary



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MAINE FUTURES COMMUNITY MAPPER



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Select an Area of Interest

Select area of interest: (select) [dropdown]

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Download Area Report

Display Reference Data Layers

Explore Suitabilities & Scenarios

Suitability

- Forestry
- Agriculture
- Conservation
- Development

Conflicts

- Forestry and Development
- Agriculture and Development
- Conservation and Development

Opportunities

- Forestry and Conservation
- Agriculture and Conservation

Adjust layer transparency

Summarize Download Compare

Development Without Conflicts

Scenarios

- 2006 Conditions (Reference)
- Continued Current Conditions

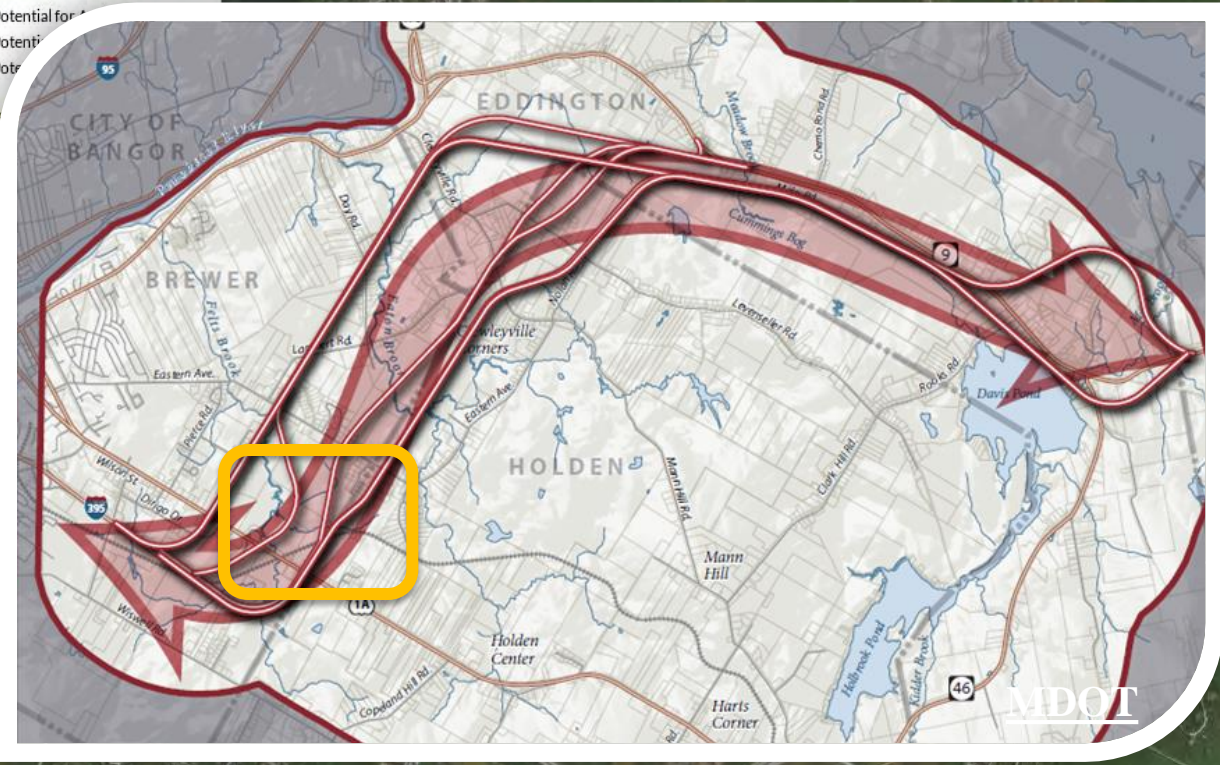
LEGEND

Opportunity: Agriculture and Conservation

- High Potential for Agriculture
- High Potential for Conservation
- High Potential for Both

Boundaries

Water



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Select an Area of Interest

Select area of interest:
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Display Reference Data Layers

Explore Suitabilities & Scenarios

Suitability

- Forestry
- Agriculture
- Conservation
- Development

Conflicts

- Forestry and Development
- Agriculture and Development
- Conservation and Development

Opportunities

- Forestry and Conservation
- Agriculture and Conservation
- Development Without Conflicts

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Scenarios

- 2006 Conditions (Reference)
- Continued Current Conditions

LEGEND

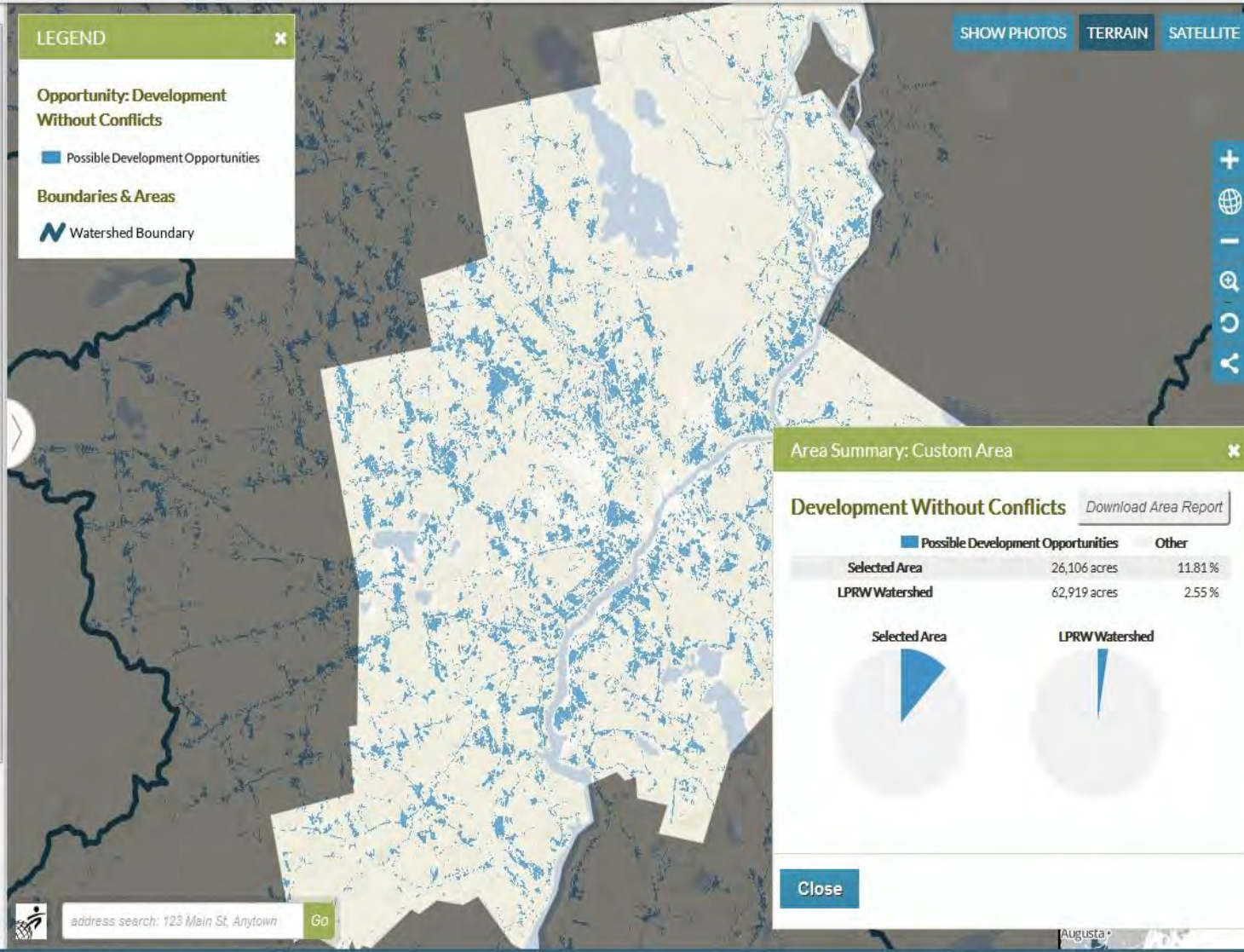
Opportunity: Development Without Conflicts

- Possible Development Opportunities

Boundaries & Areas

- Watershed Boundary

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Area Summary: Custom Area

Development Without Conflicts [Download Area Report](#)

	Possible Development Opportunities	Other
Selected Area	26,106 acres	11.81%
LPRW Watershed	62,919 acres	2.55%



[Close](#)

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MAINE FUTURES COMMUNITY MAPPER



- Forestry and Conservation
- Agriculture and Conservation
- Development Without Conflicts
- Scenarios**
 - 2006 Conditions (Reference)
- Continued Current Conditions
 - A1
 - A2
 - B1
 - B2

Adjust layer transparency

Summarize Download Compare

Compare and Display Data Layers

Suggested Comparisons to Explore

(select) ▼

