The Value of Florida Beaches

Jim Houston

Esthetic
Recreational
Environmental
Storm-Damage Reduction
Economic

Ft Myers Beach

1 Engineer Research and Development Center, Corps of Engineers
(Paper will appear in Shore and Beach, 81(4), 2013)
Esthetic Value

Most Beautiful Beach in the U.S. (USA Today, 2013)

- Siesta Key Beach

Traveler’s Choice Number One Beach Destination in the U.S. (TripAdvisor, 2012)

- Captiva Island Beach

- St Petersburg Beach

America’s Most Romantic Beach (America’s Best, 2013)
Esthetic Value

Best Family Beach in the World
(Travel Channel, 2013)

Destin Beach

Best Party Beach in the World
(Travel Channel, 2013)

Miami Beach

Sanibel Island

Author Frommer’s Favorite Travel Destination in the World

9 of the Traveler’s Choice Top 25 beaches are in Florida – the most in U.S., beating out Hawaii (Trip Advisor, 2013)
Esthetic Value

In 19 of last 23 years, Florida and Hawaii beaches have been named “America’s Best Beach” by Dr Beach

- 1992 Bahia Honda
- 1994 Grayton Beach
- 1995 St Andrews Beach
- 2002 St Joseph Peninsula Beach
- 2005 Fort DeSoto Park
- 2008 Caladesi Island State Park
- 2011 Siesta Key Beach
Recreational Value

- Florida beaches had about 810 million beach day visits in 2012, **the most of any state or country in the world** (Florida DEP, 2008; 2010; VisitFlorida, 2013; Houston, 2013)
- Four of the ten most visited beaches in the US are in Florida (Travel and Leisure, 2012)
- Florida beaches have 70 times more tourist visits than visits to Yellowstone, Yosemite, and the Grand Canyon combined (Park Service, 2012)

Miami Beach  Daytona Beach  Hollywood  Brevard County
Recreational Value

- Florida beaches have more tourist visits than all theme parks and National Parks combined.
- Florida beaches have an annual recreational value of about $50 billion (Houston, 2013).

National Park Service, 2012; Themed Entertainment Association, 2012
Environmental Value

- Past – At times sea turtles could not nest on eroded beaches
  - Jacksonville Beach, 1964
  - Delray Beach, early 1970s
  - Miami Beach, 1977

- Now – Restored Beaches
  - “JAX Beach sees record sea turtle nests” (ActionNewsJAX.com, 2012)
  - “2012 best turtle nesting season in 32 years in South Florida” (Palm Coast Post, 2012)
  - “Endangered sea turtles nesting at record level along southeast U.S. coast” (Reuters, 2013)
Storm-Damage Reduction Value

Based on damage of 540 structures by Hurricane Eloise in the Florida Panhandle, even a 50-ft increase in beach width significantly reduces damage (Dean, 1988).

Holgate, NJ, “Complete destruction – it’s like a war zone”

6 miles away at Brant Beach, NJ, “No overwash or wave damage”
Economic Value

- If Florida were a country, it would have the most tourists visits in the world

<table>
<thead>
<tr>
<th>Country</th>
<th>Tourists (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>87.3</td>
</tr>
<tr>
<td>France</td>
<td>79.5</td>
</tr>
<tr>
<td>United States</td>
<td>62.3</td>
</tr>
<tr>
<td>China</td>
<td>57.6</td>
</tr>
<tr>
<td>Spain</td>
<td>56.7</td>
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</tbody>
</table>

- If Florida were a country, it would have the second most spending by tourists in the world

<table>
<thead>
<tr>
<th>Country</th>
<th>Spending (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>90.5</td>
</tr>
<tr>
<td>Florida</td>
<td>67.2</td>
</tr>
<tr>
<td>Spain</td>
<td>59.9</td>
</tr>
<tr>
<td>France</td>
<td>53.8</td>
</tr>
<tr>
<td>China</td>
<td>48.5</td>
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</tbody>
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World Tourism Organization 2012 and VisitFlorida 2013
Economic Value

- Florida tourists spent $71.8 billion in 2012 with tourism the #1 job provider, directly supporting 1 million of Florida’s 8.7 million jobs


- Florida governor, Rick Scott, said that gains in Florida tourism show that it is, “… the leading driver of Florida’s rebounding economy.”

(Herald-Tribune 2012)
Economic Value

• Although 22\textsuperscript{nd} in land area, because of its beaches, Florida has the highest U.S. insured land value of $2.5 trillion (InsuringFlorida, 2013)

• Florida’s public school districts are the primary beneficiaries of local property taxes (Murley et al, 2003)

• International tourists spent $25.2 billion in 2012 in Florida, earning about 50% more foreign exchange than the entire U.S. export crop of corn and wheat (Census Bureau, 2012, Department of Commerce, 2012)
Economic Value

- Florida’s beach nourishment program can be justified solely on the $25.2 billion spent by international tourists.
- However, international tourists have vacation options.
  - Canadians can go to the Bahamas.
  - UK and German tourists can go to Spain.
  - Brazilians can go to Barbados.
- If Florida beaches are not maintained, international tourists will go elsewhere, and the U.S. will lose revenues far in excess of beach nourishment costs.

A Ft Lauderdale beach following Hurricane Sandy.
Supporting the Goose that Lays the Golden Egg

Golden Egg

- Florida beach tourists generate local, Florida State, and Federal taxes of $1.0, 2.3, and $3.2 billion respectively


Total annual taxes generated by Florida beach tourists $6.5 billion
Condition of the Goose

- Almost half of Florida’s 825 miles of shoreline is critically eroding (Florida DEP, 2010)

- Dean et. al. (1988) showed Federal navigation projects are responsible for ~ 80% to 85% of erosion on the east coast of Florida (lesser % on west coast)
Taking from Versus Supporting the Goose

- Tax revenues generated by Florida beach tourists are 100 times expenditures on Florida beach nourishment.

Total funding of Florida beach nourishment in 2012 versus tax revenues generated by Florida beach tourists.
Supporting the Goose

- If Federal and State governments matched local spending on beach restoration as a % of the taxes they collect that are generated by Florida beach tourists, the Federal program would be ~ $75 million annually and the State program ~ $45 million.

**Percentage of tax collected from beach tourists spent on Florida beach nourishment in 2012**

(Houston, 2013)
Supporting the Goose

• A 1% decline in spending by Florida beach tourists:
  - Reduces Federal tax revenues more than $30 million (versus $2 million for Florida beaches in the President’s 2013 Budget for the Corps of Engineers)
  - Reduces State tax revenues by more than $20 million (greater than the State beach nourishment program)

![Graph showing the impact of a 1% decrease in Florida beach tourist spending on tax revenues.](image)
Casting Stones at the Goose

• U.S. Senator Coburn from Oklahoma published a 2009 Congressional report arguing that nourishing beaches was a waste of Federal taxes

Casting Stones at the Goose

- Senator Coburn supported funding of $58.7 million in the 2013 President’s Budget for the Corps of Engineers for recreation at 27 Oklahoma lakes (Corps 2012)

- Oklahoma lake funding was more than national funding of $37 million for beach nourishment ($2.0 million for Florida beaches)

- Oklahoma lakes have less than 3% of the number of day visits to Florida beaches, but received over 1000 times as much funding per day visit as Florida beaches
Lake Versus Beach Recreation

- Originally built for flood control, much of the spending at Corps lakes is to operate recreation facilities including 95,244 camping sites; 31,360 picnic sites; 1,657 playgrounds; 3,484 boat ramps, ..., 485 marinas, and 99,809 marina slips (Corps 2010)

- Orrin Pilkey asks why Kansas farmers should pay for beach nourishment. The President’s Budget had $27 million for Kansas recreational lakes and $2 million for Florida beach nourishment

- Lakes had over $600 million in the President’s Budget for Corps’ operations and maintenance that did not have to be justified as new construction as did the $37 million for national beach nourishment
Supporting the Goose

- The Federal government provides little support to beach versus inland recreation despite Florida beaches having more day visits than all Corps and National Park facilities combined.

President’s 2013 Budget spending per tourist visit

One of 2500 Corps’ recreation facilities
Supporting the Goose

- Florida is “enlightened”, having dedicated beach restoration funding (~$20 million in 2013-2014)

- Florida budget (13-14) has $247 million for Seaport Grants (recall 80 - 85% erosion due to navigation channels)

Jobs

- From 2000 - 2010, Florida spent 46% of its tax incentives to attract manufacturing jobs

- From 2007 – Apr 2013, Florida lost 24.5% of its manufacturing jobs, but tourism jobs increased 12.1% (Federal Reserve, 2013)

- “Tourism is our state’s number one competitive advantage”
  - Florida TaxWatch, 2013
Summary

Esthetic Value

• The world sings the praises of the esthetic value of Florida beaches

Recreational Value

• Florida beaches are the most visited beaches in the U.S./world and have an annual recreational value of $50 billion

Environmental Value

• No beaches, no sea turtles

810 million day visits
"If you look at the towns that have had engineered beaches, up and down the state, those are the towns whose damage was minimal. Other towns that didn’t, the damage was much greater."

- NJ Governor Chris Christie

Economic Value

- Tourism is vital to Florida’s economy with tourists spending ~ $72 billion and tourism being the #1 provider of jobs in Florida

(Florida TaxWatch, 2013)
Conclusions

- Beaches are Florida’s #1 physical resource
- Their value is not sufficiently recognized in Florida’s budget
  - Budget is ~ $75 billion
  - Beaches budget ~ $20 million
  (1% decline in beach tourists reduces Florida tax income by > $20 million)
- Tourists have ample options and will go elsewhere if Florida’s beaches are not maintained
- It is critical to maintain Florida’s beaches
The End