



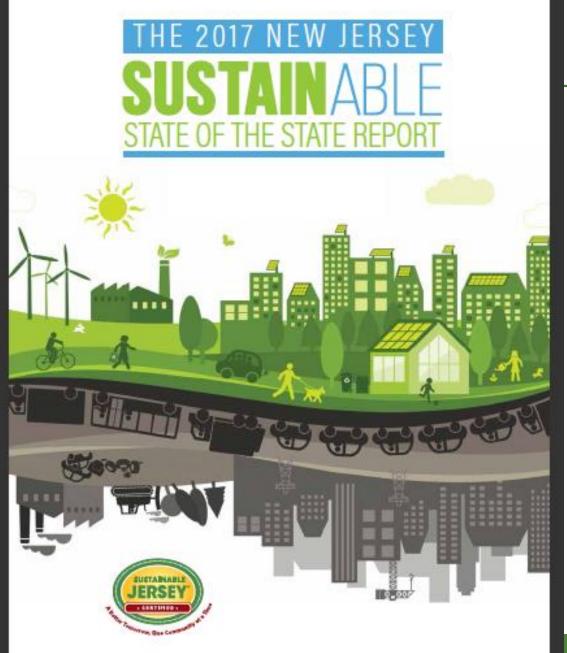


2017 Sustainable State of the State Report: What's New?

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- Defines *sustainability* for New Jersey along....
 - 14 dimensions (water, energy, health...), in terms of ...
 57 goals that describe the <u>outcomes</u> we wish to see;
- Measures progress toward (or away from) goals by...
 - o 113 unique indicators.





- Inadequate progress on 26 out of 57 goals
- Positive progress on 8 goals
- (Insufficient data/unclear trend on 40% of goals)
- Direction of progress changed for **7** goals
- New data for about **1/3** of indicators





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WATER

Why Does It Matter?

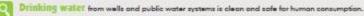
A fundamental condition necessary for any human civilization or settlement to flourish is to secure adequate water for drinking and agriculture, and then to protect those water supplies as growth occurs. New Versey is blessed with rich water supplies and 46 inches of rainfall per year. However, we still have droughts, and despite maintaining high water quality at the tap, we place interse demands on our water supply and infrastructure that strains its functional capacity to serve people and competes with the needs of ecceystems. Our infrastructure for drinking water, wastewater and stormwater is old and requires significant and costly upgrades. Meanwhile, development has degraded many watersheds and most of our water badies are not safe for faining and swimming. Add the threat of climate change to an already stressed system and water becomes one of our great challengies.

The Goal

New Jersey's water system provides an adequate and affordable supply of clean and safe drinking water for everyone, while also safeguarding water sources to ensure sufficient quality and supply to support healthy ecosystems and biodiversity. Many new chemicals and prescription drugs, for which we do not test routinely, are appearing in drinking water. In 2014, the State of NJ reported that one of these (toxic perfluorinated compounds) occurred in 67% of water systems sampled.



How Is New Jersey Doing?



Public Water Supply Violations

The percent of community water systems meeting current standards for microbial and chemical contamination is high and has not changed significantly.

7 Tep Water Quality

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Surface Water Quality

The partian of NJ's water bodies that meet quality standards for various uses is declining. Fewer than 20% of water bodies in New Jersey are rated as "fully supporting" recreational use and fewer than 1% are safe for fishing for consumption.

River and Stream Biodiversity

Surveys of streambed life (benthic macroinvertebrates) show that the number of stretches of New Jersey rivers with health rated "excellent" is in decline. The number rated "poor" is also in decline.

Water supply, including stream flow and groundwater recharge, is sufficient both for human uses (household, agricultural, and recreational) and for ecosystems, providing for healthy aquatic and riparian habitat and biodiversity.

Surface Water Flow

Four of ten NJ watersheds had impaired surface water flow from 2000-2009. This figure would be higher if we accounted for sensitive species and critical water supply regions, this figure would be higher.

Ground Water Level

There are currently no statewide data readily available that show the condition of all our groundwater and aquilers, although there are regional indications of concern.

The water system, including infrastructure for water supply, stormwater and wastewater, provides adequate capacity and functions at needed standards. It is resilient to almost change, taking future demands and vulnerabilities into account.

Backlog of Infrastructure Upgrades

The estimated cast of upgrading our existing infrastructure to a basic regulatory compliance standard is over forty billion dollars, and climbing.

Making Infrastructure Resilient to Climate Change

There is currently no analysis that provides a comprehensive estimate of the cost of upgrading our water infrastructure beyond mere compliance to achieve resilience to the impacts of climate change.

Access for all New Jesseyams to water resources for all necessary uses is universally affordable and fairly distributed now and across generations.

Affordability of Water to Low Income People and Communities
 4
 The cost of water and sever arrently is not a major strain on household budgets for low-income earners.

Cost Burden For Municipal Water System Upgrades

The cost of needed upgrades, if implemented, would put a major strain on the state's poorest cities and their residents. Although this detailed analysis has not been done statewide, it is clear that this challenge is significant for municipalities across the state.

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INTURAL CAPITAL

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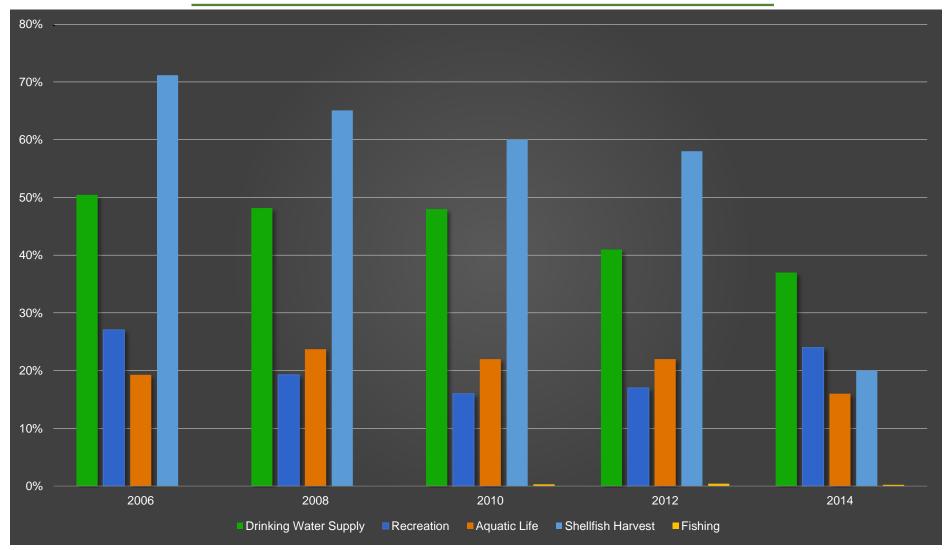
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Surface Water Quality: % water bodies "fully supporting" uses





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Waste Dimension



Solid waste production is minimized in New Jersey.

📑 Solid Waste Generation

The total amount of municipal solid waste generated in NJ per year has oscillated since about 2003.

Reuse and recycling of the waste that is produced are maximized.

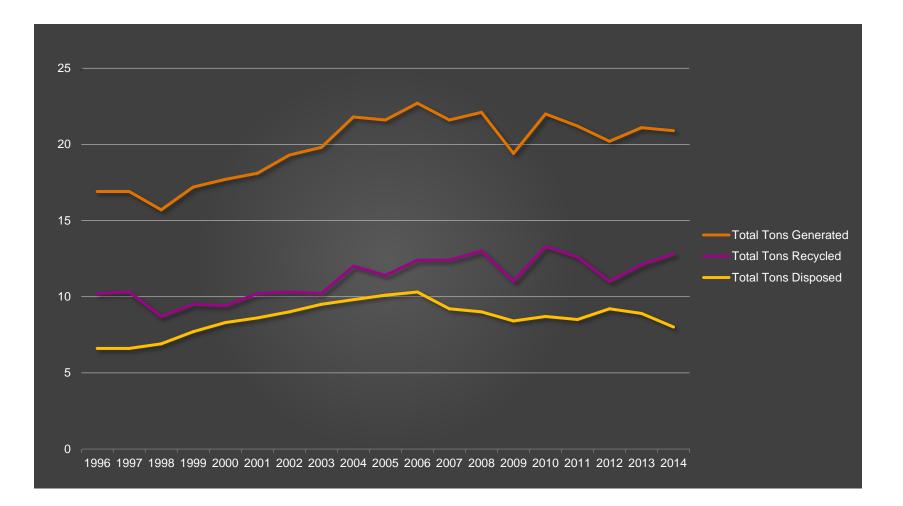
Recycling and Disposal

The percentage of municipal waste in NJ that is recycled has risen in recent years, finally exceeding 1995 levels in 2014.



Solid Waste in NJ: Generated, Recycled, Disposed





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Energy Dimension



Negative impacts from extraction, production, and consumption of energy on environmental, social, and human health are minimized. Greenhouse gas (GHG) emissions are reduced in time to help avoid catastrophic climate change.



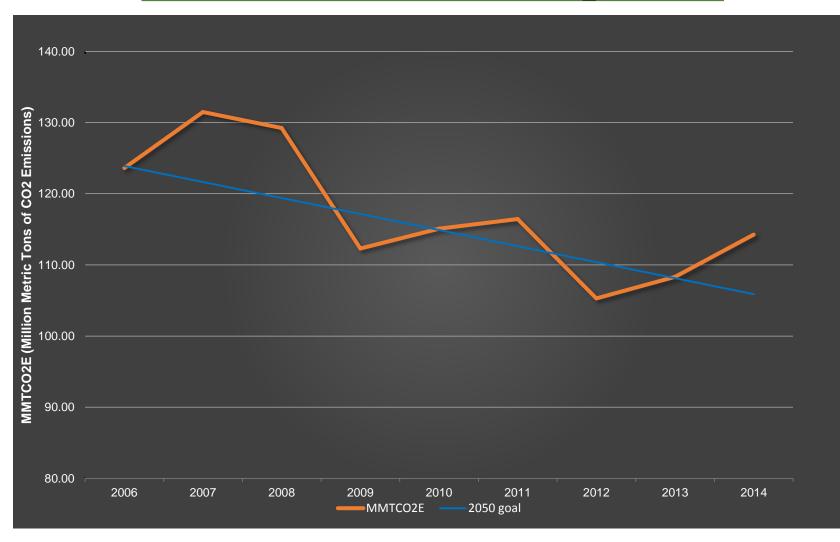
Greenhouse Gas Emissions from Energy 🜡

Annual greenhouse gas emissions from energy consumption have declined since 2006. Yet, the recent upturn in emissions has taken us off the necessary trajectory, established by state policy, to avoid the worst impacts of climate change.



Actual vs. Target Emissions: MM Tons of CO₂



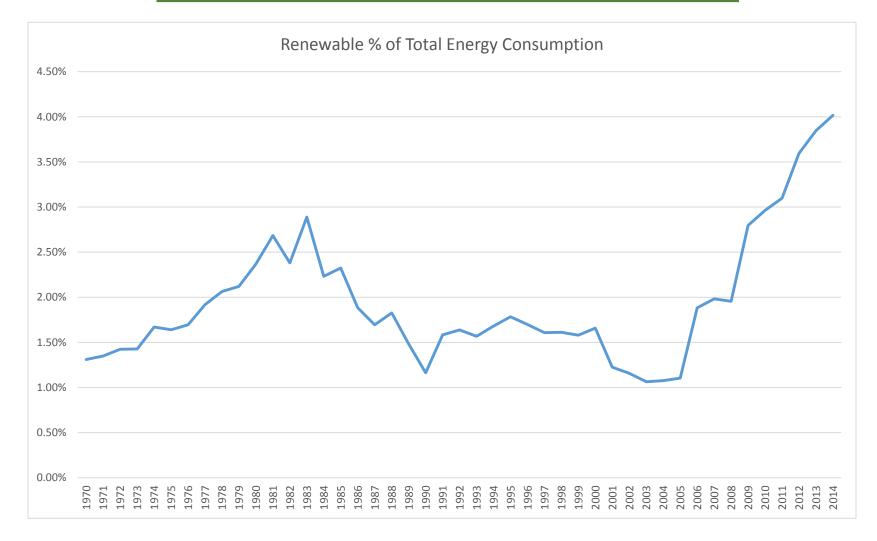


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Renewable Energy as % NJ Energy Consumption





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Energy Dimension



Vulnerabilities are reduced through a transition to a diverse mix of safe, renewable energy sources that are relatively invulnerable to disruption or depletion over the long term.

📱 Energy from Renewable Sources 💧

The portion of NJ's total energy that comes from renewable sources has steadily risen since 2005.





- Median income continues to rise
- % households living in poverty finally began to decline in 2013
- Official unemployment rate finally recovered to near pre-recession levels.
- % underemployed (working part time while wishing to work full-time) still higher than before the recession







 Sustainability not just concerned with *total* environmental/social harms and benefits
 ... but with their *distribution*.

• Thus, equity is a theme across all the dimensions of our sustainability in the SSSR assessment.





Not so good news...

- Increasing income inequality
- Stubborn and large racial and class disparities in:
 OHealth
 - o Education

 Geographic (by neighborhood) distribution of air pollution and toxic waste





- Sustainable Jersey = "*collective impact*"!
- We are:
 - o committed and networked social actors
 - with a common agenda for solving specific environmental & social problems (our sustainability goals)
 - othrough a structured form of collaboration (our certification program & partners).