Environmental Health

Air Quality, Safe Drinking Water, Wastewater Management, Clean Communities

Healthy Hawai‘i 2020

A Community Health Plan

Outdoor Air Quality

Climate change poses risks to human health, the environment, cultural resources, the economy, and quality of life. These changes are expected to create further challenges to protecting human health and welfare. Many effects of a changing climate are already evident and will persist into the future regardless of future levels of greenhouse gas (GHG) emissions. For example, average U.S. temperatures are rising, snow and rainfall patterns are shifting, and more extreme climate events—like heavy rainstorms and record high temperatures—are already affecting society, human health, and the environment. Potential climate change impacts may also make it more difficult to achieve clean air goals. To better protect human health and the environment, we must recognize and consider the challenge a changing climate poses to the environment.

Air quality has improved significantly. Levels of those pollutants linked to the greatest health impacts continue to decline. From 2003 to 2011, national population-weighted ambient concentrations of fine particulate matter (PM2.5) and ozone have decreased 26 percent and 16 percent, respectively. Even with this progress, in 2010 approximately 40 percent of the U.S. population lived in counties with air that did not meet health-based standards for at least one pollutant. Long-term exposure to elevated levels of certain air pollutants has been associated with increased risk of cancer, premature mortality, and damage to the immune, neurological, reproductive, cardiovascular, and respiratory systems.

Indicators

- Reduce greenhouse gas emissions (in million metric tons of carbon dioxide equivalent).
  - 2010 Baseline: 16.57
  - Hawaii 2020 target: 15.34
  - HP 2020 objective: --
- Reduce carbon monoxide emissions (Honolulu)
  - 2010 Baseline: 1.8
  - Hawaii 2020 target: 1.0
  - HP 2020 objective: --

Strategies

- Decrease the threats posed by climate change by reducing greenhouse gas emissions and taking actions that help to protect human health.
- Help communities and ecosystems become more sustainable and resilient to the effects of climate change.
- Achieve and maintain health and welfare-based air pollution standards and reduce risk from toxic air pollutants.
- Restore and protect the earth's stratospheric ozone layer and protect the public from the harmful effects of ultraviolet (UV) radiation.

Further resources

Hawaii Greenhouse Gas Program

Safe Drinking Water

Hawaii's water resources are the lifeblood of our communities, supporting our economy and way of life. Across the State, we enjoy and depend upon reliable sources of clean and safe water. Just a few decades ago, some of our drinking water systems provided very limited treatment to water coming through the tap. Drinking water was often the cause of illnesses linked to microbiological and other contaminants. Many of our surface waters would not have met today's water quality standards. Some of the State's rivers were open sewers, posing health risks, and many water bodies were so polluted that safe swimming, fishing, and recreation were not possible. We have made significant progress since enactment of the landmark Clean Water Act (CWA), Safe Drinking Water Act (SDWA), and Marine Protection, Research, and Sanctuaries Act approximately 40 years ago.

Indicators

- Increase the percent of community water systems that provide drinking water that meets all applicable health-based drinking water standards.
  - 2013 Baseline: 96%
  - Hawaii 2020 target: 99%
  - HP 2020 objective: --

Strategies

- Achieve and maintain standards and guidelines protective of human health in drinking water supplies, fish, shellfish, and recreational waters, and protect and sustainably manage drinking water resources.
- Protect, restore, and sustain the quality of rivers, lakes, streams, and wetlands on a watershed basis, and sustainably manage and protect coastal and ocean resources and ecosystems.
- Improve our understanding of emerging potential waterborne threats to human health, develop new criteria, and validate testing methods that provide quicker results and enable faster action on beach safety.
- Take measures to incorporate climate change considerations into clean water and drinking water program planning and implementation.
- Increase the amount of financial assistance for public water system infrastructure to maintain drinking water quality.

Further resources

Safe Drinking Water Branch

Wastewater Management

Promoting sustainable management of municipal wastewater and storm water infrastructure is critical. We will continue to work with federal, state, and local partners to bring appropriate and effective solutions to small, rural, and disadvantaged communities. We will continue to promote robust planning that includes an assessment of green, sustainable alternatives, and will continue to work with municipalities on implementing the integrated planning process for wastewater and storm water management on a case-by-case basis.

We will also work more aggressively to reduce and control pollutants that are discharged from industrial, municipal, agricultural, and storm water sources, and vessels, as well as to implement programs to prevent and reduce pollution that washes off the land during rain events. By promoting green infrastructure and sustainable landscape management, we will help restore natural hydrologic systems and the health of aquatic ecosystems to reduce pollution from storm water events.

Indicators

- Increase the percentage of wastewater treatment plants in full compliance.
  - 2013 Baseline: 92%
  - Hawaii 2020 target: 95%
  - HP 202 target: --
- Increase the percentage of water reuse.
  - 2013 Baseline: 15.88%
  - Hawaii 2020 target: 20.00%
  - HP 2020 target: --
- Reduce the number of cesspools
  - 2015 Baseline: 87,043
  - Hawaii 2020 target: 85,0000
  - HP 202 target: --

Strategies

- Implement innovative technologies.
- Provide tax credits to qualifying cesspools through 2016 Act 120 implementation.
- Ensure all wastewater treatment plant operators are in compliance with training standards.
- Increase the amount of financial assistance for public wastewater system infrastructure.

Further resources

Wastewater Branch

Clean Communities

Uncontrolled releases of waste and hazardous substances can contaminate our drinking water and land and threaten healthy ecosystems. Local land use and infrastructure investments can also generate unanticipated environmental consequences, such as increased storm water runoff, loss of open space, and increased greenhouse gas emissions. We lead efforts to preserve, restore, and protect our land, air, and water so that these precious resources are available for both current and future generations. We will continue our work to prevent and reduce exposure to contaminants, accelerate the pace of cleanups, and reduce the environmental impacts associated with land use across the country. We work collaboratively partners to achieve these aims.

In addition, we will work with communities to address risks posed by intentional and accidental releases of hazardous substances into the environment and ensure that communities have an opportunity to participate in environmental decisions that affect them. Our efforts are guided by scientific data, research, and tools that alert us to emerging issues and inform decisions on managing materials and addressing contaminated properties.

Indicators

- Increase the amount of solid waste recycled.
  - Baseline (2010): 627,316 tons
  - Hawaii 2020 target: 1,200,000 tons
  - HP 2020 target: --
- Increase the percent of solid waste recycled.
  - Baseline (2010): 35%
  - Hawaii 2020 target: 50%
  - HP 2020 target: --

Strategies

- Conserve resources and prevent land contamination by reducing waste generation and toxicity, promoting proper management of waste and petroleum products, and increasing sustainable materials management.
- Prepare for and respond to accidental or intentional releases of contaminants and clean up and restore polluted sites for reuse.
- Conserve and protect natural resources by promoting pollution prevention and the adoption of other sustainability practices by companies, communities, governmental organizations, and individuals.

Further resources

Solid & Hazardous Waste Branch