ENVIRONMENTAL HEALTH

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 2000 to 2023, national air quality based on ambient concentrations of fine particulate matter (PM2.5) and ozone have decreased 29 percent for the 24-hour PM2.5 standard, 37 percent for the annual PM2.5 standard, and 12 percent for the 8-hour ozone standard. Even with this progress, in 2023 approximately 42 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

RELATED OBJECTIVE

Reduce statewide greenhouse gas emissions (excluding aviation), Act 234 SLH 2007

State	Year	Million Metric Tons CO_2 Equivalent
Baseline	1990	15.48
Target	2030	≤15.48

INDICATORS

RELATED OBJECTIVE

Reduce statewide greenhouse gas emissions (including aviation), Act 238, SLH 2022 and Act 15, SLH 2018

State	Year	Million metric tons CO_2 Equivalent
Baseline	2005	22.87
Target	2030	≤11.44
Target	2045	Net negative

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
- https://health.hawaii.gov/opppd/files/2024/03/18_2005-2018-2019-Inventory_Final-Report_rev2.pdf

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. We have made significant progress since enactment of the Safe Drinking Water Act (SDWA) 50 years ago.

INDICATORS

Increase the percent of community water systems providing drinking water that meets all applicable health - based drinking water standards

State	Year	Percentage
Baseline	2019	99%
Target	2030	99%

RELATED OBJECTIVE

Healthy People 2030

STRATEGIES

- Achieve and maintain standards and guidelines protective of human health in drinking water supplies and protect and sustainably manage drinking water resources.
- Take measures to incorporate climate change considerations into 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
- https://health.hawaii.gov/opppd/files/2024/03/32_SFY2023.DWTRLFLegislativeReportwAttachments_FINAL.pdf

CLEAN RECREATIONAL WATER

The Clean Water Branch (CWB) protects public health of residents and tourists who enjoy recreating in and around Hawaii's coastal and inland water resources and protects surface waters to ensure healthy aquatic life and wildlife. This is accomplished through statewide coastal water surveillance and environmental management through a combination of permit issuance, monitoring, enforcement, and public education.

The CWB helps to reduce the risk of illness to users of Hawaii's beaches due to sewage pollution by monitoring beaches and issuing prompt public advisories in response to exceedances of the Beach Action Value. Illness risk may be reduced by providing timely public advisories and risk communication to the public so personal decisions may be made based on individual risk tolerances.

INDICATORS

RELATED OBJECTIVE

Beaches Monitored by CWB

State	Year	Percentage
Baseline	2020	31%
Target	2030	41%

STRATEGIES

- Explore alternative resources to allow a greater number of beaches that can be monitored.
- Evaluate alternative fecal indicators to allow rapid and more reliable assessment of human health risk.
- Achieve and maintain standards and guidelines protective of human health and aquatic life in recreational waters, and protect surface 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.
- Take measures to incorporate climate change considerations into clean water program planning and implementation.

FURTHER RESOURCES

- Clean 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

RELATED OBJECTIVE

Increase the percentage of wastewater treatment plants in full compliance

State	Year	Percentage
Baseline	2019	94%
Target	2030	95%

Increase the percentage of recycled water use

State	Year	Percentage
Baseline	2019	18.2%
Target	2030	25.0%

Reduce the number of cesspools

State	Year	Number
Baseline	2021	88,000
Target	2030	81,000

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
- https://health.hawaii.gov/opppd/files/2024/03/9_Cesspool-Grant-Program-Legislature-Report.pdf
- https://health.hawaii.gov/opppd/files/2021/12/Report-to-the-Thirty-First-Legislature-2nd-Interim-Report-for-Cesspool-Conversion-Working-Group-1.pdf
- https://health.hawaii.gov/opppd/files/2024/03/10_SFY23-Water-Pollution-Control-Revolving-Fund-Legislature-Report.pdf
- https://health.hawaii.gov/opppd/files/2024/03/8_2023-Board-of-Certification-Legislature-Annual-Report.pdf
- https://health.hawaii.gov/wastewater/home/reuse/#RecycledWaterResults

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 with 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

RELATED OBJECTIVE

Increase the amount of solid waste recycled

State	Year	Tons
Baseline	FY2011	627,316
Target	2030	1,200,000

Increase the percent of solid waste recycled

State	Year	Percentage
Baseline	FY2011	35%
Target	2030	70%

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 source reduction and the adoption of other sustainability practices by companies, communities, governmental organizations, and individuals.

FURTHER RESOURCES

- Solid & Hazardous Waste Branch
- https://health.hawaii.gov/opppd/files/2024/03/27_2024-OSWM-Legislative-Report.pdf
- https://health.hawaii.gov/opppd/files/2024/03/28_2024-SWS-SCR64-SD1-Report.pdf