Suggested Citation:

Governor: Kim Reynolds
Lieutenant Governor: Adam Gregg
IDPH Director: Gerd W. Clabaugh

Report Contact Information:
Jonn Durbin, MA, CPM
jonathan.durbin@idph.iowa.gov
515-281-8936

Louise Lex, PhD, MS
louise.lex@idph.iowa.gov
515-281-4348

<<Rest of Page Intentionally Left Blank>>
FOCUS AREA: Environmental Health

What Health Issues Are Included
Water Quality
Radon

Environmental Health Measures of Health Improvement

<table>
<thead>
<tr>
<th>EH-1</th>
<th>Increase the percentage of drinking and recreational waters monitored for quality.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rivers and Streams</td>
<td>Lakes and Reservoirs</td>
</tr>
<tr>
<td>Target: 56%</td>
<td>Target: 65%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>EH-2</th>
<th>Increase the percentage of assessed drinking and recreational waters that fully meet water quality standards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rivers and Streams</td>
<td>Lakes and Reservoirs</td>
</tr>
<tr>
<td>Target: 21%</td>
<td>Target: 31%</td>
</tr>
</tbody>
</table>


See also Chronic Disease Measures of Health Improvement for measures related to radon: reducing lung cancer incidence (CD-6) and the lung cancer death rate (CD-2).
**Iowa Health Issue: Water Quality**

Iowa Counties with Local Strategies

Buchanan, Dubuque, Hardin, Keokuk, Winneshiek

These community health improvement plans are available on the Iowa Department of Public Health, Community Health Needs Assessment and Health Improvement Planning (CHNA&HIP) website: [https://idph.iowa.gov/chnahip/health-improvement-plans](https://idph.iowa.gov/chnahip/health-improvement-plans)

**Goals, Objectives & Strategies**

**Water Quality**

**Goal #1** Ensure a healthy and safe environment for work and play.

**Alignment with National Plans**


**Alignment with State / Other Plans**


**Water Quality**

**Objective 1-1** Provide consistent and fair regulatory assistance to increase the percentage of regulated public water supplies meeting health-based drinking water standards.

<table>
<thead>
<tr>
<th>Baseline Year</th>
<th>Baseline Value</th>
<th>Target Year</th>
<th>Target Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>94.5%</td>
<td>2017</td>
<td>97%</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>2019</td>
<td></td>
</tr>
</tbody>
</table>

**Data Source & Location** Iowa Public Drinking Water Program Annual Compliance Report [www.iowadnr.gov](http://www.iowadnr.gov)

**Strategy 1-1.1** Spread awareness of how water quality impacts Iowans’ health, the environment, and the economy through all water programs.

**Strategy Type** Individual/interpersonal-focused

**Strategy Source & Location** Iowa Department of Natural Resources Strategic Plan

**Who’s Responsible** DNR Environmental Services

**Target Date** Jul 1, 2021

**Strategy 1-1.2** Build and expand partnerships with environmental groups, public health agencies, communities, and industry organizations to improve understanding and management of animal feeding operations impacting water quality.

**Strategy Type** Community-focused

**Strategy Source & Location** Iowa Department of Natural Resources Strategic Plan

**Who’s Responsible** DNR Environmental Services

**Target Date** Jul 1, 2021

**Strategy 1-1.3** Educate customers to fully use financing opportunities through the State Revolving Fund and other sources for water and wastewater system improvement.

**Strategy Type** Individual/interpersonal-focused
**Water Quality**

**Goal #2** Provide clean water to Iowa citizens and reduce health risks by eliminating contaminants.

### Alignment with National Plans


### Alignment with State / Other Plans


#### Water Quality

**Objective 2-1** On an annual basis, reduce the health risk across the state by assessing and managing heavy metal exposure (arsenic and lead).

<table>
<thead>
<tr>
<th>Baseline Year</th>
<th>Baseline Value</th>
<th>Target Year</th>
<th>Target Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>0 - Not assessing/managing</td>
<td>2021</td>
<td>1 - Assessing/managing</td>
</tr>
</tbody>
</table>

*Data Source & Location:* New objective, to be developed.

**Strategy 2-1.1** Engage partners to identify heavy metal exposure in water resources.

**Strategy Type:** Professional/provider-focused

**Strategy Source & Location**

- New strategy

**Who's Responsible**

- State Hygienic Laboratory, Center for Health Effects of Environmental Contamination

**Target Date**

- Jul 1, 2021

**Strategy 2-1.2** Provide outreach and educate communities for a monitoring program and best practices.

**Strategy Type:** Professional/provider-focused

**Strategy Source & Location**

- New strategy

**Who's Responsible**

- State Hygienic Laboratory

**Target Date**

- July 1, 2018

**Strategy 2-1.3** Develop a mitigation plan and remediation practices.

**Strategy Type:** Policy-focused

**Strategy Source & Location**

- New strategy
Who's Responsible
State Hygienic Laboratory and Iowa Department of Public Health, Bureau of
Environmental Health Services

Water Quality

Objective 2-2 Mitigate health risk across the state by monitoring pesticide and
pharmaceutical residue in drinking water and human bodies.

| Water Quality | Objective 2-2 | Mitigate health risk across the state by monitoring pesticide and
pharmaceutical residue in drinking water and human bodies. | Baseline Year | Baseline Value | Target Year | Target Value |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2017 0 - No monitoring</td>
<td>2020</td>
<td>1 - Monitoring</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data Source & Location
New objective, to be developed.

Water Quality

Strategy 2-2.1 Develop analytical methodologies for a bio-monitoring
program in pesticides and pharmaceuticals.

| Water Quality | Strategy 2-2.1 | Develop analytical methodologies for a bio-monitoring
program in pesticides and pharmaceuticals. | Strategy Type | Professional/provider-focused |
|---------------|---------------|---------------------------------------------------------------------------------|---------------|-------------------------------|

Strategy Source & Location
New strategy

Who's Responsible
State Hygienic Laboratory

Target Date
Jan 1, 2019

Water Quality

Strategy 2-2.2 Establish a bio-monitoring program for pesticide and
pharmaceutical residues.

| Water Quality | Strategy 2-2.2 | Establish a bio-monitoring program for pesticide and
pharmaceutical residues. | Strategy Type | Policy-focused |
|---------------|---------------|---------------------------------------------------------------------------------|---------------|-----------------|

Strategy Source & Location
New strategy

Who's Responsible
State Hygienic Laboratory

Target Date
Jan 1, 2019

Water Quality

Strategy 2-2.3 Engage partners to conduct risk assessments.

<table>
<thead>
<tr>
<th>Water Quality</th>
<th>Strategy 2-2.3</th>
<th>Engage partners to conduct risk assessments.</th>
<th>Strategy Type</th>
<th>Professional/provider-focused</th>
</tr>
</thead>
</table>

Strategy Source & Location
New strategy

Who's Responsible
State Hygienic Laboratory, Center for Health Effects of Environmental Contamination

Target Date
Jan 1, 2021
Water Quality

Goal #3 Increase efforts to clean up Iowa's surface and ground waters and prevent pollution, with a focus on protecting drinking water and popular recreation waters.

Alignment with National Plans
Clean Water Act (1972) with amendments https://www.epa.gov/laws-regulations/summary-clean-water-act

Alignment with State / Other Plans
Iowa Nutrient Reduction Strategy (2013) http://www.nutrientstrategy.iastate.edu/

Objective 3-1 Secure passage of a long-term, sustainable and accountable source of funding to address Iowa's water quality and quantity challenges.

Baseline Year | Baseline Value | Target Year | Target Value
--- | --- | --- | ---
2016 | 0 | 2018 | 1

Data Source & Location Legislative tracking, http://www.iowaswaterandlandlegacy.org/

Strategy 3-1.1 Advocate for passage of a 3/8ths cent sales tax to fund Iowa Natural Resources and Outdoor Recreation Trust Fund or other source of new, dedicated, sustainable funding.

Strategy Type Policy-focused

Strategy Source & Location
Natural Resources and Outdoor Recreation Trust Fund passed by Iowans in 2010, but never funded. https://ballotpedia.org/Iowa_Natural_Resources_and_Outdoor_Recreation_Trust_Fund,_Amendment_1_(2010)

Who's Responsible
Iowa's Water and Land Legacy Coalition, Iowa Environmental Council

Target Date May 1, 2017

Strategy 3-1.2 Support the creation of an Iowa Watershed Investment Board to provide management and oversight for investment of Iowa's water resources in a coordinated, statewide approach focused on achieving multiple benefits and leveraging funding from other state, federal, local and private sources.

Strategy Type Policy-focused

Strategy Source & Location

Who's Responsible
Iowa Environmental Council

Target Date Jul 1, 2017

Objective 3-2 Advocate for the strengthening of rules for concentrated livestock feeding operations (CAFOs), especially in sensitive areas such as karst (underground limestone region with sinks and underground streams) and wellhead protection zones and watershed areas above public lakes where lax siting and manure management rules are most likely to threaten drinking and recreation waters.

Baseline Year | Baseline Value | Target Year | Target Value
--- | --- | --- | ---
2017 | 0 | 2018 | 1

Data Source & Location New objective, to be developed.
Water Quality

**Strategy 3-2.1**
Support a 5-year temporary suspension of approval for new CAFOs or expansion of existing CAFOs in known karst areas while state rules governing siting and manure management in areas such as karst, identified as posing special threats to drinking water or public health, undergo review by a blue-ribbon stakeholder panel that includes representatives of counties, cities, environmental and public health organizations, and agricultural groups.

**Strategy Source & Location**
New strategy

**Who's Responsible**
Iowa Environmental Council and partners

**Target Date**
Jan 1, 2017

---

**Objective 3-3**
Support expansion of water quality monitoring for drinking and recreational waters with monitoring results available to the public.

<table>
<thead>
<tr>
<th>Data Source &amp; Location</th>
<th>Iowa's Ambient Water Quality Monitoring and Assessment Program <a href="http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Water-Monitoring">http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Water-Monitoring</a></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Strategy 3-3.1</th>
<th>Assure that watershed management authorities and other watershed efforts incorporate the widely accepted watershed approach that includes assessment, monitoring, and public education.</th>
</tr>
</thead>
</table>

**Strategy Type**
Policy-focused

**Strategy Source & Location**
New strategy

<table>
<thead>
<tr>
<th>Who's Responsible</th>
<th>Iowa Environmental Council and council partners</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Value</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
</tr>
</tbody>
</table>

---

<<Rest of Page Intentionally Left Blank>>
**Water Quality**

**Goal #4** Ensure that Iowans using private wells for water supply have a safe water supply.

<table>
<thead>
<tr>
<th>Alignment with National Plans</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alignment with State / Other Plans</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water Quality</th>
<th>Objective 4-1</th>
<th>Each year, complete testing of private wells for bacteria (coliform), nitrate, and arsenic.</th>
<th>Baseline Year</th>
<th>Baseline Value</th>
<th>Target Year</th>
<th>Target Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source &amp; Location</td>
<td>Iowa Public Health Tracking Portal, Private Well Water Data <a href="https://pht.idph.state.ia.us/Pages/default.aspx">https://pht.idph.state.ia.us/Pages/default.aspx</a></td>
<td></td>
<td>2016</td>
<td>Bacteria 8,800</td>
<td>2021</td>
<td>Bacteria 10,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nitrate 6,700</td>
<td></td>
<td>Nitrate 6,500</td>
<td></td>
<td>Nitrate 6,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arsenic 1,040</td>
<td></td>
<td>Arsenic 1,150</td>
<td></td>
<td>Arsenic 1,150</td>
</tr>
</tbody>
</table>

**Water Quality**

**Strategy 4-1.1** Promote the use of Grants to Counties money for private well testing. **Strategy Type** Individual/interpersonal-focused

**Strategy Source & Location**
Grants to Counties Water Well Program

**Who’s Responsible**
Iowa Department of Public Health, Environmental Health Services Bureau
**Target Date**
Jun 1, 2021

**Water Quality**

**Strategy 4-1.2** Track the progress of private well testing from the Iowa Public Health Tracking Portal. **Strategy Type** Policy-focused

**Strategy Source & Location**
Iowa Department of Public Health, Environmental Health Services Bureau strategy

**Who’s Responsible**
Iowa Department of Public Health, Environmental Health Services Bureau
**Target Date**
Jun 1, 2021
Iowa Health Issue: Radon

Iowa Counties with Local Strategies
Buchanan, Chickasaw, Greene, Mitchell, Plymouth, Pocahontas, Pottawattamie, Sioux, Winnebago, Winneshiek

These community health improvement plans are available on the Iowa Department of Public Health, Community Health Needs Assessment and Health Improvement Planning (CHNA&HIP) website: https://idph.iowa.gov/chnahip/health-improvement-plans

Goals, Objectives & Strategies

Radon
Goal #1 See Chronic Disease: Cancer, Goal 3, Objective 3-3, Strategies 3-3.1, 3-3.2, and 3-3.3

Alignment with National Plans

Alignment with State / Other Plans

Radon
Objective 1-1 See Chronic Disease: Cancer, Goal 3, Objective 3-3.

Baseline Year Baseline Value Target Year Target Value

Data Source & Location

Radon
Strategy 1-1.1 See Chronic Disease: Cancer, Goal 3, Objective 3-3, Strategies 3-3.1, 3-3.2, and 3-3.3.

Strategy Type

Strategy Source & Location

Who's Responsible Target Date

<<Rest of Page Intentionally Left Blank>>