

LIVE.
GROW.
BELONG.



Workshop #10

May 19, 2020



Today's Agenda



PRINCIPLES

1. Parks, Trails, and Open Spaces
2. Environment





Parks, Trails, and Open Spaces

VISION

Open space and recreation facilities support the physical and social well being of the community



Build on Previous Planning Efforts

1997 LUPP- CHP 4. ENVIRONMENTAL

Existing Park Types and Planned amenities

- Regional
- Community
- Neighborhood
- Woodlands/Open Space
- Specialty

LUPP Service Area

Provide neighborhood parks with $\frac{1}{4}$ to $\frac{1}{2}$ mile of homes, community parks within 1-2 miles

LUPP Land Needs

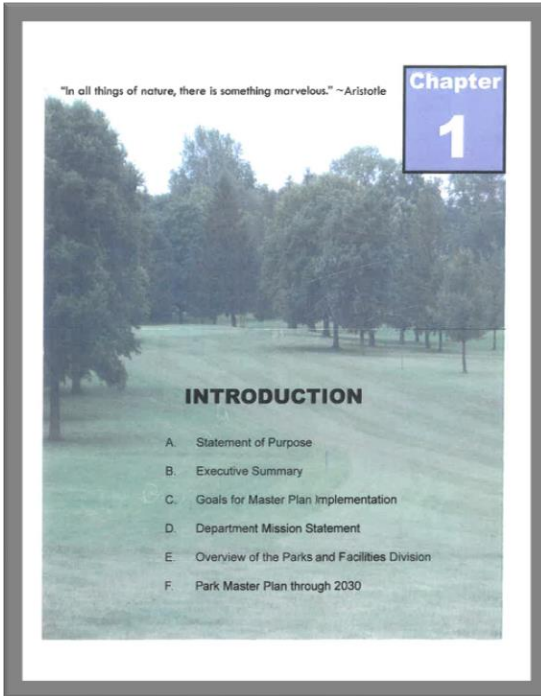
Policy of planning for 10 acres of additional park land per 1,000 people

- *Currently aprx. 18 acres of City controlled Park/Open Space per 1,000 people*
- *Increased park area from 629 acres in 1995 to aprx. 1,215 acres 2019*
 - *Highlighted by adding Ada Hayden Heritage Park 437 acres*



Build on Previous Planning Efforts

Ames Parks Plan 2013-2018



Goals for Master Plan Implementation

The Park Master Plan is intended to supplement the City of Ames Land Use Policy Plan and seeks to accomplish the following goals:

- To establish local standards for size, distribution, and levels of service for future park developments
- To provide land and parks facilities to serve the public open space and recreational needs of an expanding population
- To conserve valuable natural resources
- To determine acquisition and funding alternatives for needed developments
- To develop park use policy statements as guidelines for making future park development and redevelopment decisions
- To establish a service radius of two miles for community parks and a quarter- to a half-mile for neighborhood parks
- To plan in conjunction with residential and commercial developers so that trail connections are created
- To explore partnerships for efficient and cost-effective park and recreation facilities by combining Ames School District, Iowa State University, private funding, and City resources.
- To implement all goals formulated based on Land Use Policy Plan, City Transportation Plan, and Demographics Need (<http://www.cityofames.org/>)



Build on Previous Planning Efforts

Ames Plan 2040 public input

Survey Response

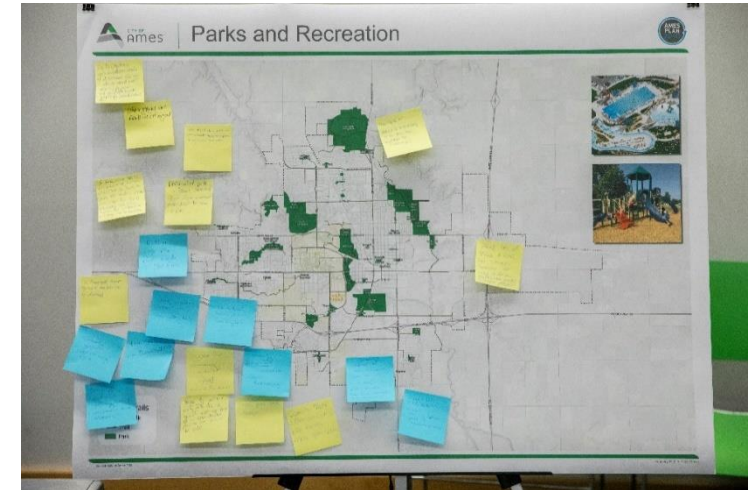
92% of Ames' residents consider "walkable neighborhoods with sidewalks and connections to trails" to be important / very important to support a healthy lifestyle and enhanced personal well-being.

Survey Response

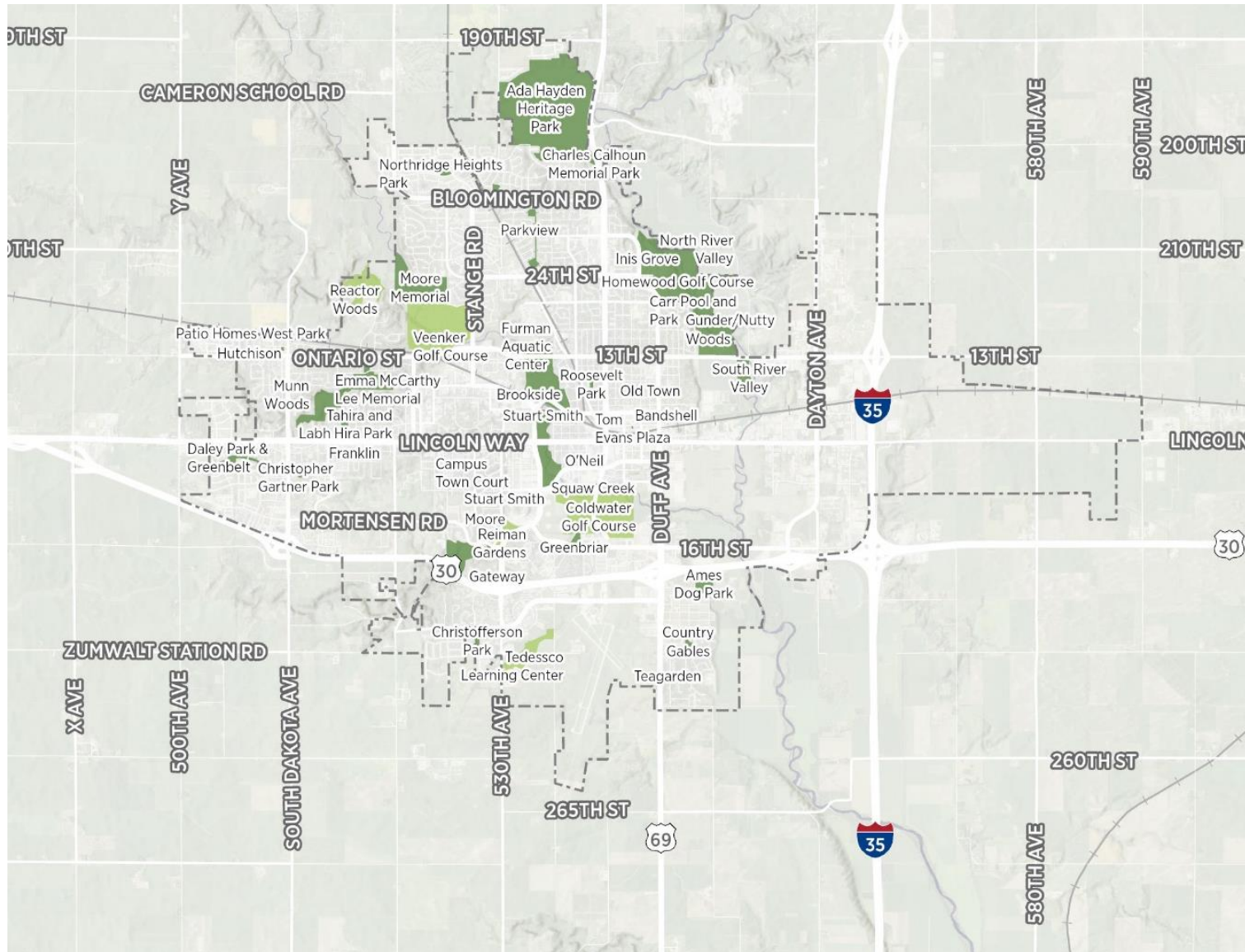
87% of Ames' residents consider "access to parks or open space within a 10-minute walk" to be important / very important to support a healthy lifestyle and enhanced personal well-being.

Survey Response

80% of Ames' residents consider the "additional walking and biking trails and paths" to be important / very important as a quality of life priority for the City.



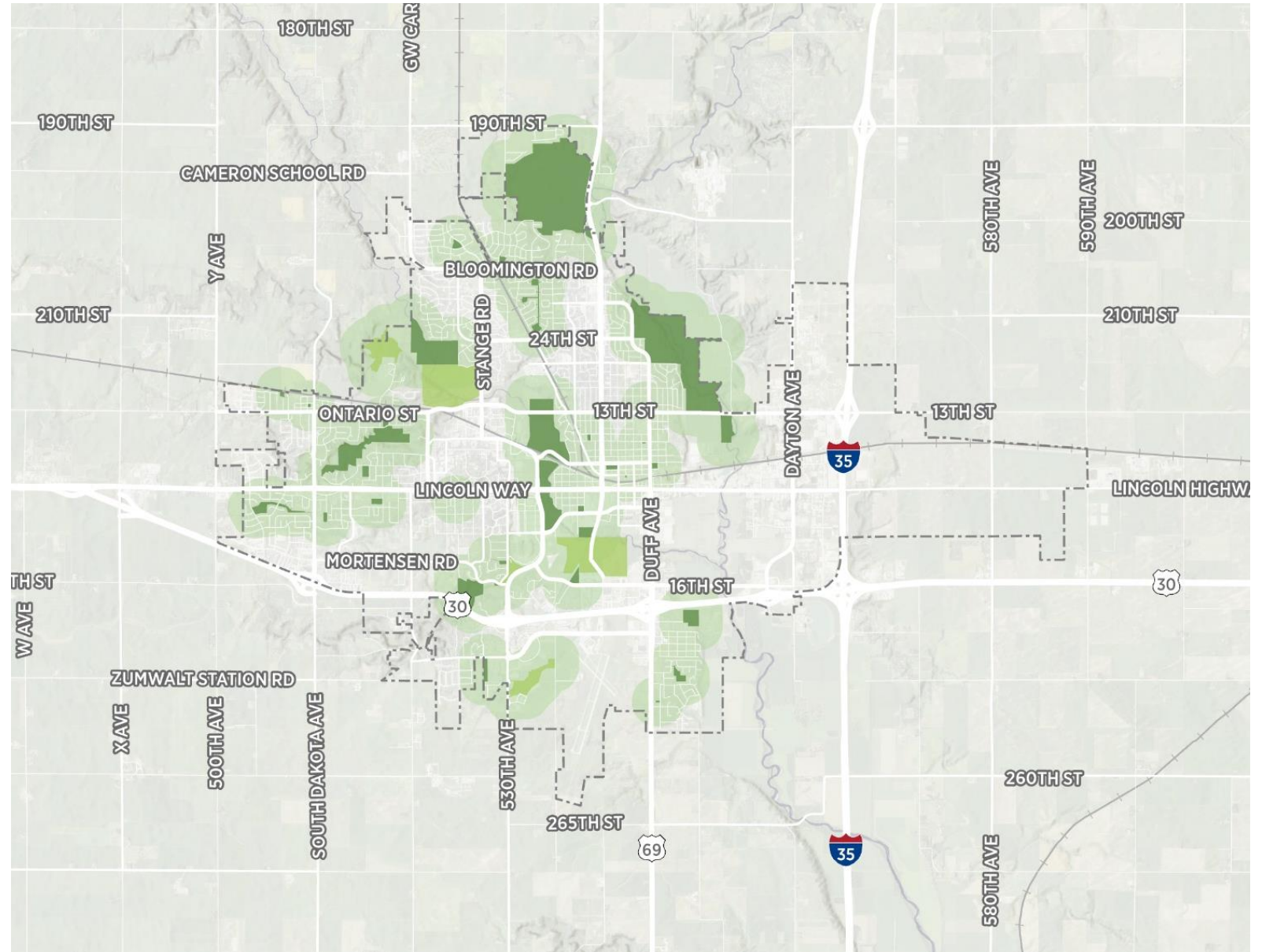
Condition // Parks, Trails, and Open Spaces



Condition // Service Areas

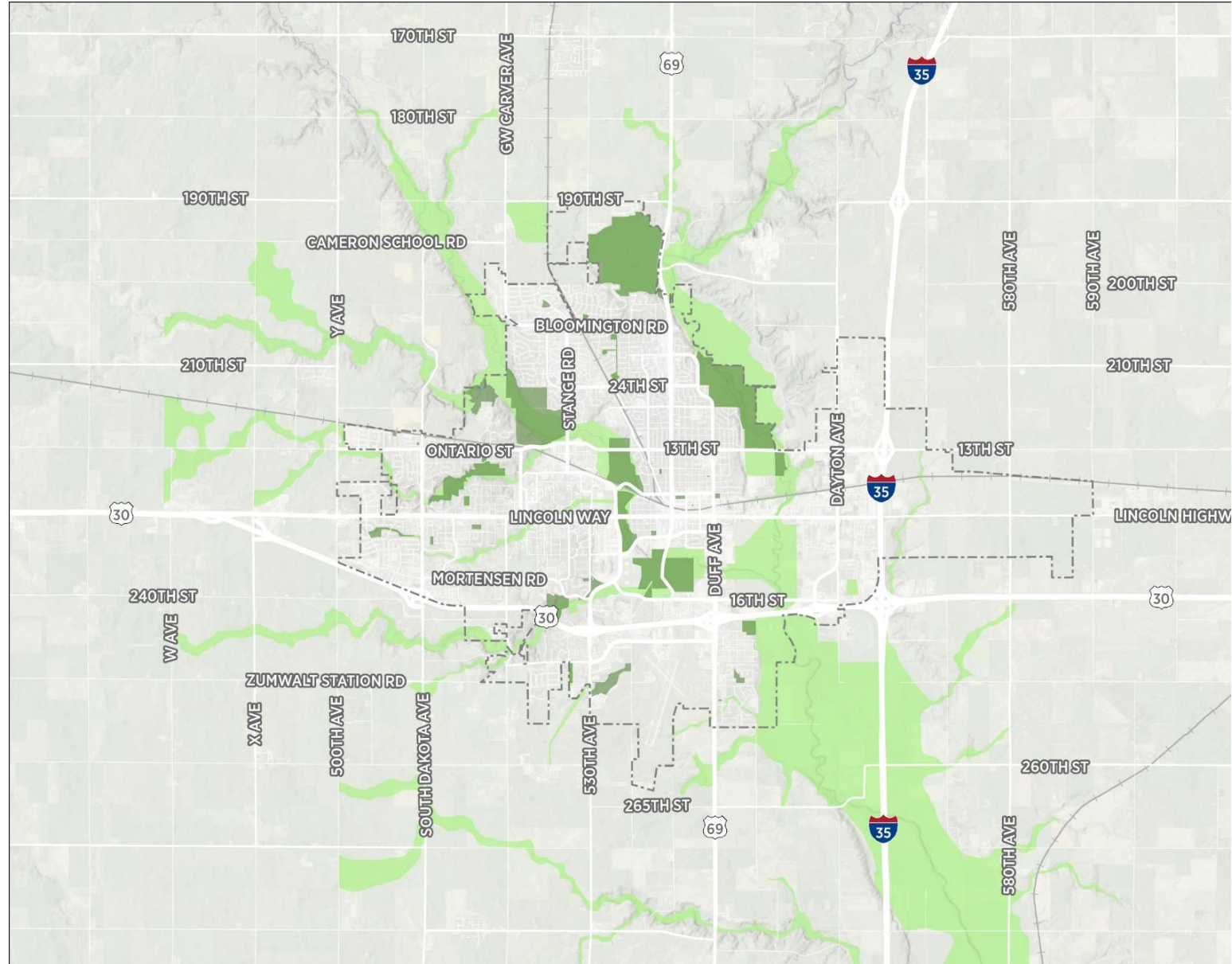
Legend

Parks-All types
¼ mile buffer



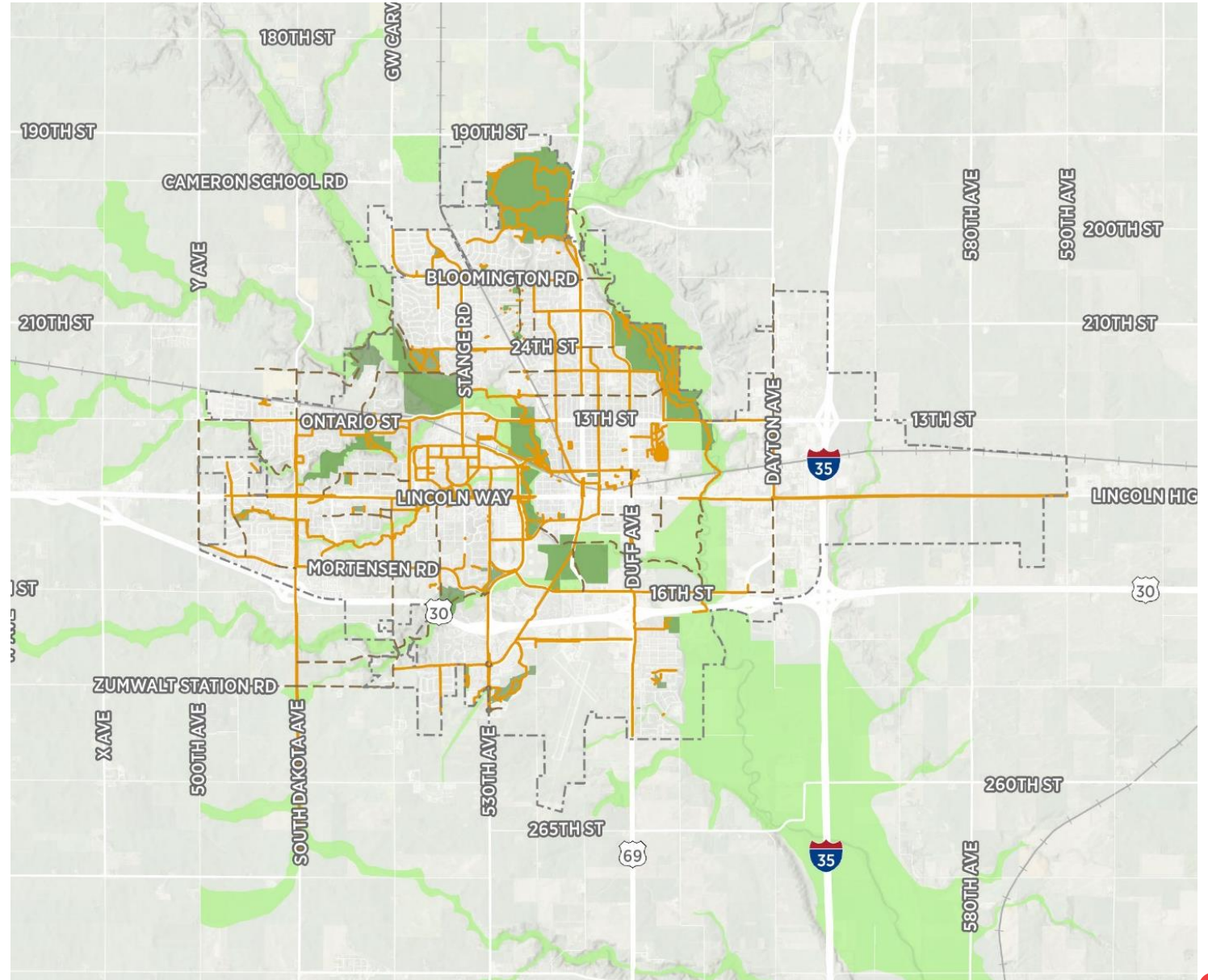
Condition // Parks, Trails, and Open Spaces

Existing Parks
+ Greenways



Condition // Parks, Trails, and Open Spaces

- Existing Parks
- + Greenways
- + Trails
- + Active Transportation



Principles // Parks, Trails, and Open Spaces

I **REFLECT COMMUNITY VALUES WITH PUBLIC SPACE FOR SOCIAL AND PHYSICAL WELLBEING THAT PRIVATE OPEN SPACE ALONE CANNOT ACCOMPLISH**

The City of Ames parks and open spaces are a jewel of the community and point of pride that brings people together from across the community

II **ACCESSIBLE AND DESIRABLE OPEN SPACE OPPORTUNITIES**

Provide for parks and open space within walkable distances of homes in addition to larger scale community park facilities

III **CONCURRENT GROWTH OF PARK LAND WITH DEVELOPMENT**

Expansion of the City will require provision of new neighborhood parks as well as a larger community parks. Population increase within the City will also create needs for additional facilities or increase use of existing facilities

IV **MAINTAIN AND EXPAND THE SYSTEM OF PARK TYPES TO MEET VARIED NEEDS OF THE COMMUNITY OVERALL**

Incorporate needed facilities into existing parks as well as into newly designed parks. Parks and trails will be designed to ensure that the spaces are safe, enjoyable, fun, and distinct

...more



Principles // Parks, Trails, and Open Spaces

- V PLAN A SYSTEM OF INTERCONNECTED GREENWAYS**
A system of greenways should preserve environmentally sensitive areas, while offering opportunities for connecting people to the outdoors, including pathways and water trails. Recognize that parks and greenway trails can be a vital part of the Transportation System.
- VI STEWARDSHIP AND VARIETY OF OPEN SPACE**
Public open space can provide for recreation as well as natural and environmentally sensitive area preservation. The City's planning will account for needed passive area experiences as well as active recreation. Some facilities may serve a dual purpose and offer opportunities to enhance the natural environment with flood control, stormwater management, water quality, reestablishment of habitat.
- VII FISCALLY RESPONSIBLE**
The parks and trail system have substantial ongoing operation costs with limited resources, that require planning, budgets, and programming to maintain the quality of new and existing facilities in recognition of available funding resources.
- VIII SUPPORT PARTNERSHIPS**
Ames will welcome partnerships to provide a diversity of recreation, natural features, and locations in the parks and trails system. The County park facilities near the community in the Fringe Area are a valuable resource to Ames and the County.



Actions // Parks, Trails, and Open Spaces

1. Maintain a high quality and ample park system and recreation facilities as the City grows.

- A. Plan for new 40-60 acre community parks with recreational facilities in larger growth areas
- B. Strive to maintain an overall open space similar to the current ratio of aprx. 18 acres per 1,000 people (include public land, partnerships, greenways, parks, special facilities)
- C. Continue the target ratio of a minimum 5 acres of new developable parkland per 1,000 people in expansion areas. Provide for additional open space (public or private) 5 acres per 1,000 people
 - *National Recreation and Park Association recommends between 6-10 acres of park space per 1,000 people, but to consider local needs first*
 - *Increase in population of 15,000 people would require 150 acres of new parks and open space to meet this goal, while the overall ratio would remain relatively the same*
- D. Use a Parks Master Plan process to guide park improvements and facility needs
 - As the community changes, needs will evolve within existing parks that could result in changes to existing facilities

2. Plan for park dedication as part of the development process with parkland dedication based upon Neighborhood Park needs.

- A. Create park land dedication ordinance or include as part of a rezoning process, allow for in lieu fee in some circumstances. Usable active space is the most desirable land for dedication to meet neighborhood park needs.
- B. Time park development with buildout of an area and as funding is available
- C. Require private open space in addition to public open space within development in expansion areas to augment overall open space
- D. Set-aside natural areas as passive open space in accordance with planned greenways or in support of larger natural preservation areas



Actions // Parks, Trails, and Open Spaces

3. Provide a park system that supports a variety of user needs.

- A. Create a park system that shares a consistent image from and between parks that identify it as a City of Ames Park, e.g. signage, fixtures, promotions
- B. Utilize a hierarchy of Regional, Community, Neighborhood, Specialty Parks, and Recreation Facilities to serve the various needs
 - Apply Neighborhood Park basic amenity features equitably across the City based upon space and needs
 - Include opportunities for new parks in existing areas
 - Consider the overall system a collection of community resources that has unique components and distinct features as an attraction to the community overall and that each park is identifiable in character when possible
 - Plan for community scale amenities within larger areas that may have broad appeal, examples include splash pads, disc golf, natural playscapes, ropes courses, sports complexes, gardens, amphitheaters, nature trails, and fishing.
 - Although Neighborhood parks area is smaller in size by definition than a community park, they may include a community scale amenity
- C. Apply an access goal to park planning of a 10-minute walk to a park or greenway
 - Use a ¼ mile to ½ mile proximity standard for Neighborhood Parks or Specialty Parks
- D. Utilize plazas as specialty parks in urban living conditions or as focal points of Core development areas. Plazas may be a private amenity feature of new development in Core areas to allow for commercial use and activities.

4. Support the user experience.

- Parks and open spaces are neighborhood and community destinations that should be safe, family-friendly, and support strong social networks.
- Parks are a publicly accessible resource for everyone.
- Consider opportunities for specialty parks to meet local needs in underserved areas
- Greenways can be used for open space linkages and in some cases transportation linkages
 - Plan to create uninterrupted greenways with continuous trails.
 - Plan for separated road crossings of major roadways for continuous trails when creating greenways (*Include Map for Future Major Trails*)
 - Linkages with external areas are desirable



Actions // Parks, Trails, and Open Spaces

5. Support Parks and Open Space environmental opportunities.

- A. An open space framework is valuable to the character of the community. In some instances, open space may provide primarily environmental benefits rather than recreation benefits.
- B. Designing for environmental priorities includes:
 - Natural stream way preservation and water quality enhancement for supporting human and aquatic life (Ada Haden Watershed)
 - Stormwater run-off management through land use design and other protective measures
 - Air quality through tree canopy management, continue planting of trees in response to emerald ash bore and replacement of unhealthy trees
 - Support non-vehicular travel and connections with trails
 - Natural resource/habitat areas conservation.

6. Apply conservation standards in growth areas.

Within Ames' urban growth area, employ and large-scale conservation development standards that preserve environmental resources, parks, greenways, and other open and natural areas without compromising overall density targets. Private open space can be a key component of attaining this goal of supporting density and open space.

7. Identify partnerships for meeting service needs

- A. Utilize relationships with school districts to augment recreation opportunities when possible
- B. Work with ISU to maintain availability of community resources with land leased from the University, including Furman Aquatic Center, Brookside Park, and the Ice Arena
- C. Continue work with volunteer organizations to support maintenance and programming within the City's park and open space system
- D. Look to take advantage of available grant funding from local, state, and federal agencies and non-profit foundations.
- E. Coordinate with Story County Conservation on planning for regional trails, greenways, habitat preservation, especially with the expansion areas of the City that will be urbanized and are unlikely to remain rural.



Actions // Parks, Trails, and Open Spaces

Legend

Parks

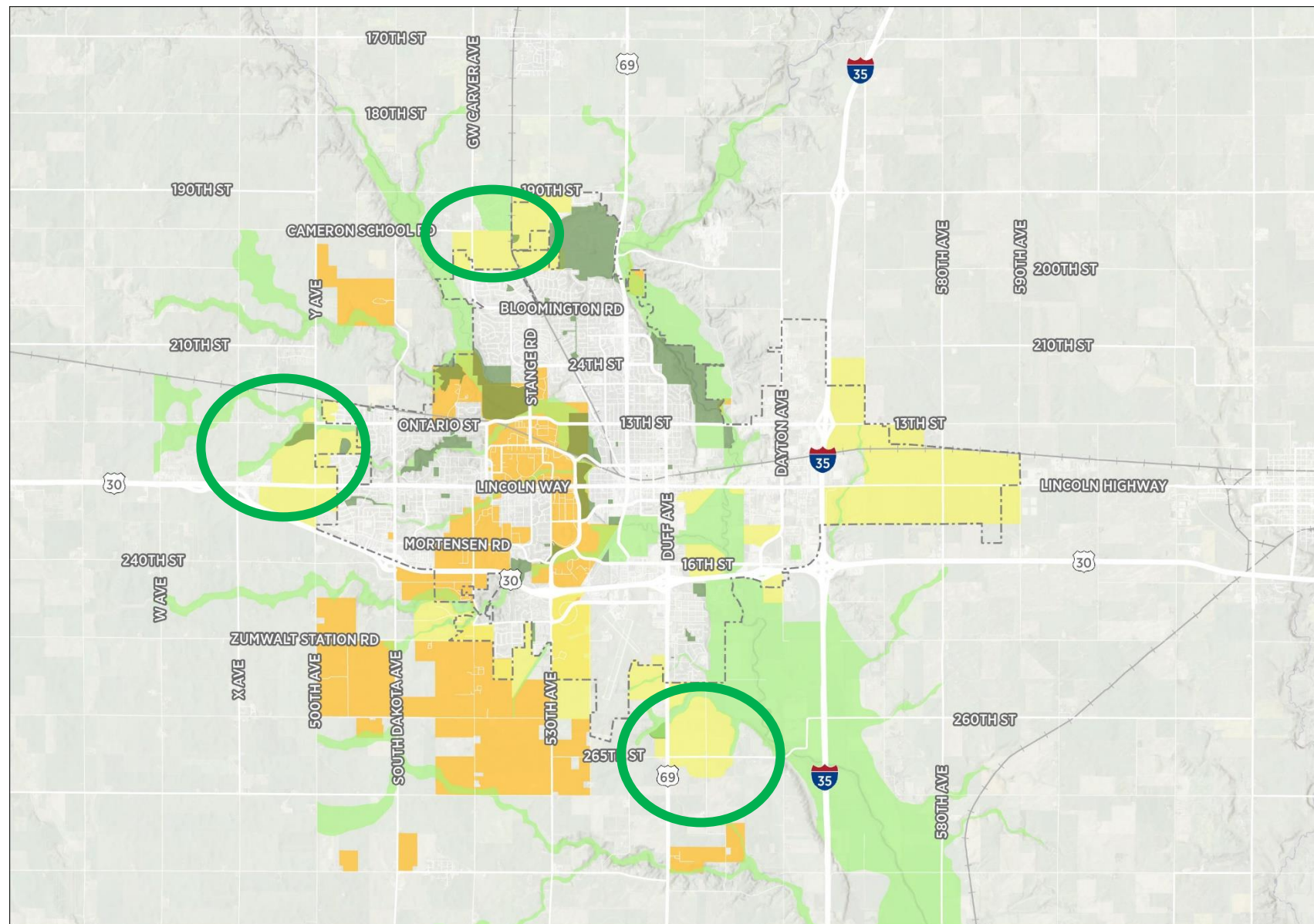
Greenways

Tier 1&2 Areas for
City Expansion



Primary Future Residential

ISU Land

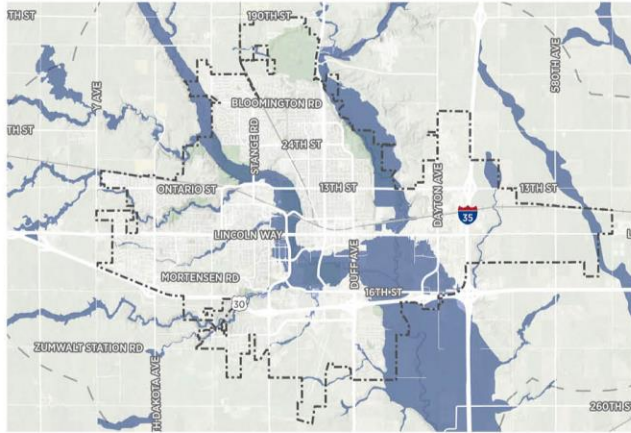




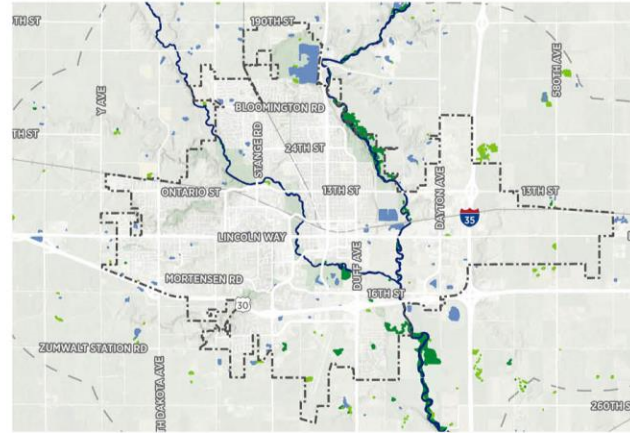
Ames will practice environmental stewardship to support a high quality natural environment



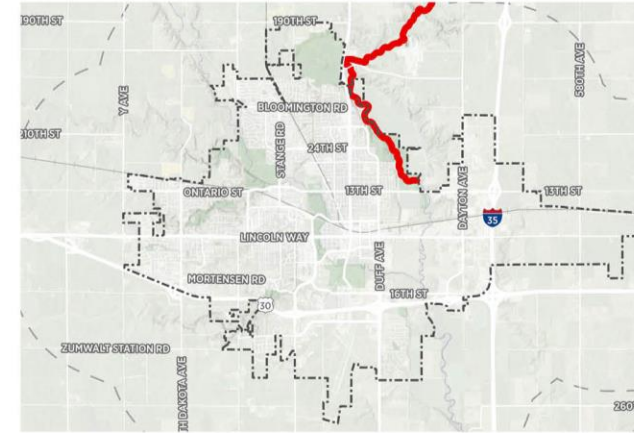
Conditions



Source: Federal Emergency Management Agency (FEMA)



Source: USGS



Source: Iowa DNR

FLOODPLAINS

Floodplains are fundamental to the watershed and habitat approach. The 1% annual chance indicates a 1% chance of flooding in any given year, while the 0.2% annual chance indicates a 0.2% chance of flooding in any given year.

Ames is no stranger to flooding, which caused damage in 2008, 2010, and most recently in 2018. The City has created a flood watch program to monitor risk and better predict when flooding may occur. While flooding cannot be stopped, it can be planned for to ensure safety of residents and minimal damage to property.

+ WETLANDS AND STREAMS

Wetland mapping is an important strategy to look at connecting the hydric (wet) soils and sensitive areas. Most of the wetlands are adjacent to streams or within the floodplain, but a number of small scale wetlands are scattered throughout the region. Wetlands are essential to the hydrological ecosystem because of their water-cleansing properties. The number of wetlands surfacing in the region indicates value in exploring the potential of a wetland mitigation bank to serve this region. When wetland mitigation occurs within the watershed of the original wetland, it's more effective at replicating the functions of the original wetland, assuming the mitigating wetland is well designed and managed.

+ IMPAIRED STEAM SEGMENTS

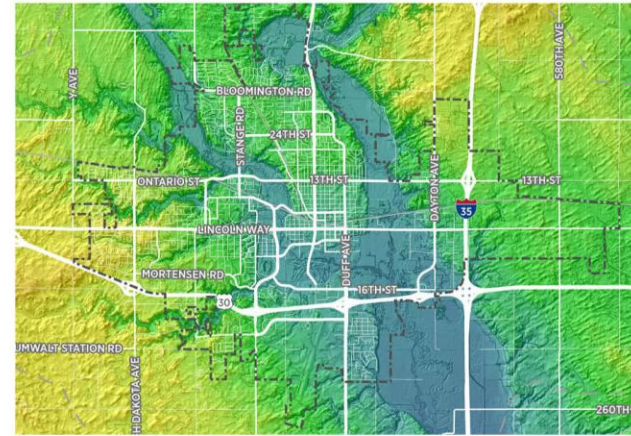
The Iowa Department of Natural Resources publishes impaired stream data every two years. When looking at stream impairment, it's important to recognize impaired waterways can range from slight to severe. This analysis focuses primarily on Category 5 impairments – stream segments requiring a Total Maximum Daily Load (TMDL), a study of the pollution amount (i.e. "load") a stream segment can withstand and meet state water quality standards. The TMDL study provides a detailed look at a stream segment's impairment and offers details that relate to potential corrective measures. Due to the number of impaired waters in Iowa, significant time lapse often occurs between calling out the need for and completing a TMDL study. At this "comprehensive plan" level, impaired segments reveal stream stretches that likely need buffers to reach its full potential.



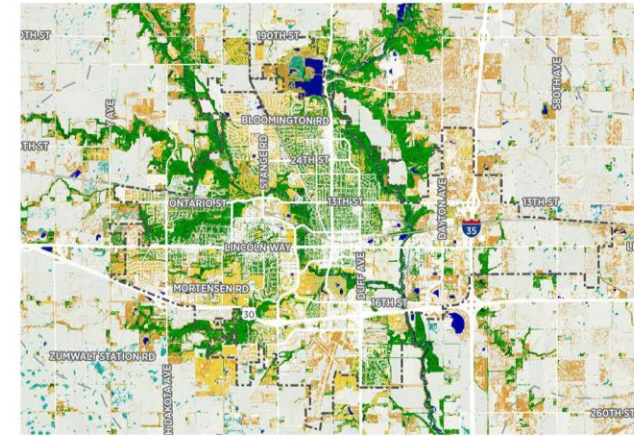
Conditions



Source: USGS



Source: USGS



Source: Iowa DNR

HYDRIC (WET) SOILS

The United States Department of Agriculture defines hydric soils as those soils that are sufficiently wet in the upper part to develop anaerobic conditions (saturation) during the growing season. Not surprisingly, Ames' area soils with a high potential for saturation follow drainage/water ways very closely and reinforce the need for buffering and connections of creeks, streams, and drainage ways.

+ SLOPES AND TOPOGRAPHY

Slopes have a direct impact on flooding/erosion, development suitability, and habitat. Much of Ames is flatter, with low-lying topography, But even modest slopes of 6% can have a significant impact on development, particularly in areas where the building footprint requiring flat terrain is large. Avoiding development in areas with steep slopes (greater than 8%) will help prevent excessive erosion and stabilize stream corridors.

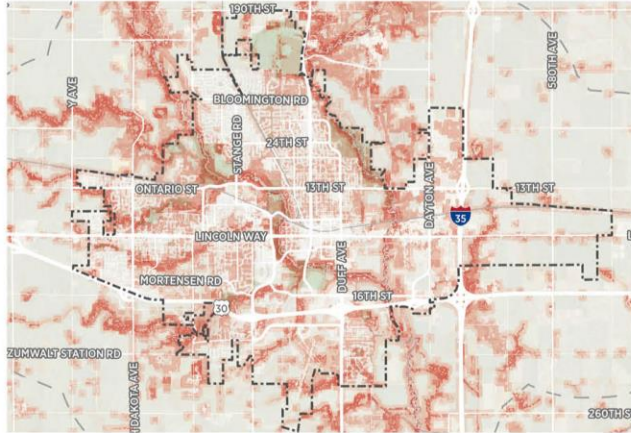
+ VEGETATION

Vegetation and land cover are major resources that can help manage stormwater, prevent erosion, moderate micro-climates, and provide more appealing physical environments. When considering woodlands and grasslands, urban areas offer some respite in a largely agricultural landscape.

Restoring and/or preserving native vegetation helps protect the habitat and provides opportunities for migratory birds and wildlife. Ames has a high correlation between species richness and some of the city's more wooded areas. Many of these areas have been difficult for development (due in some instances to wet conditions, in others to steep slopes) and have left their vegetation largely intact.



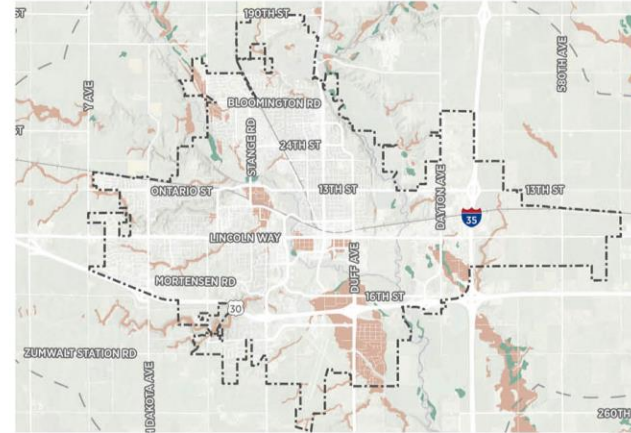
Conditions



Source: Iowa DNR

SPECIES RICHNESS

Using a gap analysis provided by Iowa State University and the Iowa Department of Natural Resources, one can understand Ames' capacity for supporting amphibians, reptiles, and bird species. The zones of light to modest development in the region are largely reflected in the species richness maps because the least disturbed lands tend to better support wildlife than areas that have been plowed or paved. There may still be pockets, however, of environmentally sensitive areas and/or native vegetation throughout the region.



Source: USGS

+ SANDY SOILS AND GREEN INFRASTRUCTURE

“Green infrastructure” speaks to the use of a series of natural systems to replace or supplement pipe and concrete infrastructure that has traditionally been used to manage stormwater in modern times. Buffers, rain gardens, and other practices that promote slowing and soaking up water make up green infrastructure. Systems that use infiltration (soaking) methods – rain gardens and bioswales– are best suited to sandier soils, particularly in areas with a lower water table. Infiltration is not the whole of the green infrastructure story. Surface based water quality improvement practices (filter strips, buffers) help remove “suspended solids” and harmful pollutants (fertilizers, oils) while slowing water down before it reaches a creek or stream.



Source: RDG, FEMA, USGS

+ CRITICAL NATURAL RESOURCE AREA

The Critical Natural Resources Areas broadly identified via this composite map can be used to point the city in the direction of areas to be included in a Environmental Conservation Overlay (EC). The EC would help to maintain the natural resource functions of these lands. These functions include erosion prevention/ watershed protection, potentially some modest level of flood mitigation, wildlife/habitat protection, and potential recreation functions. To repeat an important point made in the Species Richness section: There may still be pockets of environmentally sensitive areas and/or native vegetation throughout the region that are beyond the loose “boundaries” of these Critical Natural Resource Areas. It is recommended the city develop a process for mapping environmentally sensitive areas in the Ames region.

Composite Natural Resource Map



Principles // Environment

I **DESIGN FOR ENVIRONMENTAL PRIORITIES**

Our most environmentally sensitive land is protected from development, while areas that allow development have environmentally-friendly guidelines. Priorities include habitat preservation, water quality, flood plain projection.

II **PRESERVE A NETWORK OF GREEN SPACES**

Create and maintain a network of connected natural areas, parks and open spaces. These spaces will be located throughout the city to preserve nature's ability to manage stormwater, flooding and water quality; provide habitat for plants and animals; and provide fertile land to grow food.

III **IMPROVE WATER QUALITY**

Our green network mimics the natural system of rainwater management, thereby preventing flooding and improving our water quality.

IV **APPLY CLIMATE CHANGE CONSCIENCE POLICES**

Complete a greenhouse gas inventory and Climate Action Plan to assess strategies that may reduce Ames's emissions related to climate change. Future changes to the plan and polices may be necessary to realize this principle.

+ENSURE SUSTAINABLE GROWTH (GROWTH PRINCIPLE)

Ames new growth will be both economically and environmentally sustainable.

+STEWARDSHIP AND VARIETY OF OPEN SPACE (PARKS PRINCIPLE)

Public open space can provide for recreation as well as natural and environmentally sensitive area preservation...



Actions // Environment

1. Assess environmental conditions of all types.

The City should maintain an inventory of known environmental resources and attributes of the community that affect environmental quality. This applies to the existing community as well as to areas planned for growth. While inventory will be an ongoing effort, Ames should update their entire inventory every five to ten years. The inventory may include:

- Natural features, including floodplains, wetlands, streams, soil quality, topography, vegetation, species richness, sandy soils, critical natural resource areas, principal flow paths, and drainage-ways.
- Watershed protection
- Greenhouse gas inventory
- Climate data
- Travel demand and patterns
- Solid Waste, RDF, recycling
- Funding contributed to environmental initiatives.

2. Use planning documents and models to assist in managing environmental quality.

The City will apply appropriate data related to the conditions above to the policies of a wide range of plans and activities administered by the City, such as

- Greenhouse Gas Inventory and Climate policies
- Stormwater Management Plan
- Watershed Plans, which includes erosion control and stormwater best management practices.
- Transportation Plan that considers multi-modal transportation
- Parks and Recreation Master Plan
- Development standards and ordinances, such as flood plain, subdivision, zoning, environmentally sensitive overlays



Actions // Environment

3. Adopt policies and implement strategies identified in prepared plans.

Design for environmental priorities in development plans and city projects that would include the following:

- Natural stream way preservation and water quality enhancement for supporting human and aquatic life.
- Stormwater run-off and water quality management
- Air quality preservation through the avoidance of pollutant emitting uses.
- Vegetation maintenance and enhancement for its beautification, air cleaning, water run-off reduction, and climate modification qualities.
- Natural resource areas conservation.
- Preserve greenway areas as identified in this plan for growth areas before development occurs. Also, re-establishing natural corridors in areas that are already developed. For example, when homes or businesses relocate away from the floodplain, then the land should be returned to its natural state, rather than re-developed.
- Apply Flood Plain protection as a minimum within the 100-year Floodway Fringe and consider policies for broader protection within the 500-year flood plain.

4. Support for alternative energy systems

- Support energy efficiency and alternative energy sources to reduce reliance on fossil fuels.

5. Economic development goals shall consider resource availability and intensity of use

- The City strives to grow economically but also to be wise in the use of its natural resources. Economic development priorities should reinforce that the City prefers low water usage activities and non-polluting industries.

+ Apply conservation standards in growth areas (Parks).

Within Ames' urban growth area, employ and large-scale conservation development standards that preserve environmental resources, parks, greenways, and other open and natural areas without compromising overall density targets. Private open space can be a key component of attaining this goal of supporting density and open space.

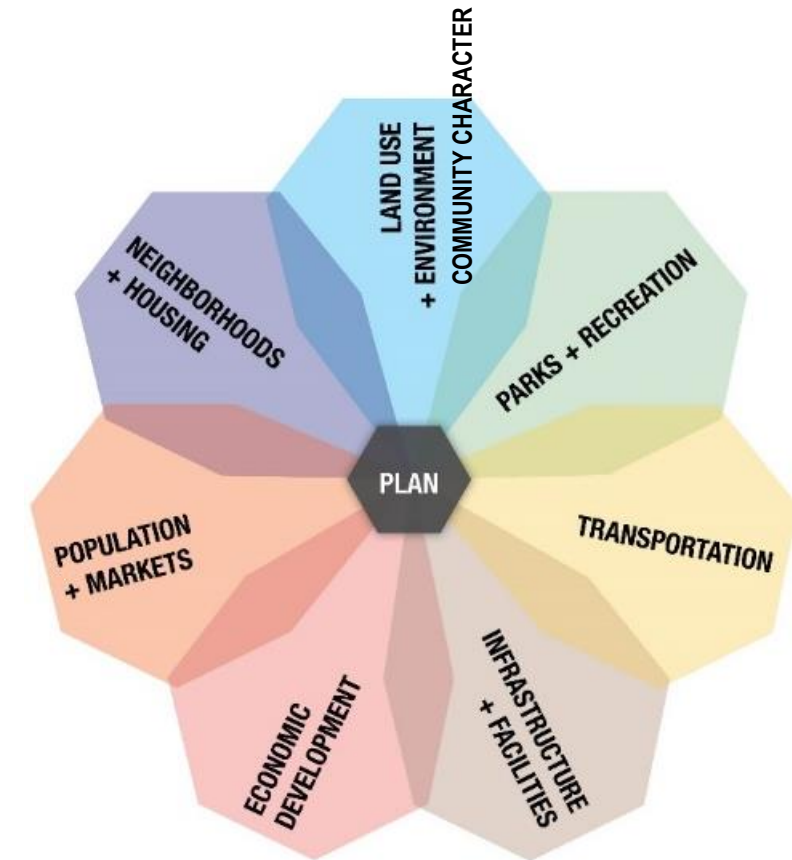


Monthly Topics

Today: > Parks, Trails, and Open Spaces
> Environment

June: > Culture, Community Character, Equity

July: > Emerging Draft Content/Draft Plan



All sections are important and interrelated.



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BELONG.



Workshop #6

December 4, 2019

