

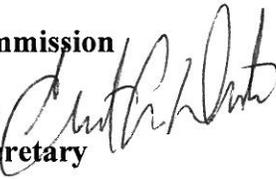


PLANNING COMMISSION

Planning & Development Services Department • 201 N. Stone Ave. • Tucson, AZ 85701

DATE: January 18, 2012

TO: Planning Commission

FROM: Ernie Duarte
Executive Secretary 

SUBJECT: Sustainable Land Use Code – Bundle 1 Text Amendments – Study Session

Issue – Attached is the first list of sustainable code amendments that are part of the Sustainable Land Use Code Project. Most are minor edits and additions to current regulations. We believe these items below will be of little concern to most community stakeholders. The timing of bringing these items to public hearing may coincide with the Land Use Code Simplification Project.

We believe it may be more efficient to package the least controversial items with the reformat projects. If items require more study and consideration, they should be noted and handled as separate public hearing items in the future.

Recommendation – Staff requests the Planning Commission review the attached proposals and consider the goals collected from community stakeholders that are noted in the diagnostic report. Staff will return with more refined amendments in future study sessions.

We request the Commission endorse a strategy to incorporate the least controversial items into the draft UDC prior to its adoption but notify the public of these items being heard during the UDC public hearings.

Background

On June 2, 2009, Mayor and Council approved a work plan for a Federal Energy Efficiency Conservation Block Grant (EECBG). The Sustainable Land Use Code Project (SLUC) is an approved project within the work plan.

One SLUC project objective was to prepare a diagnostic report outlining the City's current sustainable policies and review the current Land Use Code (LUC) for barriers to sustainability, policy gaps, and potential sustainable incentives. City staff used the services of Clarion Associates to conduct this initial diagnostic report. A second objective is to use the report's Priority Recommendations to guide a series of sustainable code amendments to the Land Use Code.

Sustainable Topics - The diagnostic report identified eleven key topics as a foundation for creating recommendations to address current policy shortcomings in the LUC. In preparing the list of recommendations Clarion reviewed current City regulations as well as best practices from around the country. It collected recommendations under the eleven topics. Each recommendation attempts to address a potential process barrier, policy gap, or create an incentive through the LUC and its supplemental standards.

The eleven topics are:

- Water Quality and Conservation;
- Alternative Energy Production and Energy Conservation;
- Mobility and Transportation and Alternate Fuels;
- Community Health and Safety;
- Food Production and Nutrition;
- Recycling and Waste Reduction;
- Open Space, Parks and Trails;
- Urban Forestry and Urban Heat Islands;
- Housing Accessibility, Diversity and Affordability;
- Green Building; and,
- Climate Change and Air Quality

The diagnostic report's recommendations were classified as *Proceed* meaning the item is ready to be formulated into a text amendment; *Consider after more research* meaning that Clarion will do further research to recommend whether the item should be pursued or further delayed. There was a third group called *Postpone*. Staff recommended these items not be pursued as part of this project.

On May 10, 2011 the Mayor and Council gave direction to proceed with this strategy and begin preparing text amendments. Staff has worked with the consultant on the first group known as Bundle 1. There will be two to three additional bundles of text amendments for policy recommendation coming.

The Land Use Code Simplification Project, which began in 2008, is expected to come before Mayor and Council by approximately July 2012. The Sustainable Land Use Code (SLUC) project will continue and any revisions will be prepared to facilitate integration into the future Unified Development Code.

Major Stakeholder Themes

In preparing the diagnostic report there were four key themes that came from meetings with stakeholders early in the process. They were the following:

Build on what has already been done – It was important that new amendments were linked to previous text amendments or successful policies that the City has already pursued.

Streamline the process – There remains concerns that new text amendments will make the development review process more challenging. The focus of the sustainable code strategy has been to overcome barriers to sustainability, find incentives to sustainable development, and fill in gaps where City policy is underdeveloped. Staff will continue to monitor proposals for their impact on the overall timeline of the development review process.

Find opportunities for incentives and flexibility - The preferred type of policy was that which was flexible or created incentives and at the same time achieved sustainable development goals. Where a policy may create a more restrictive requirement, it may be prudent to first consider the proposal as a policy first rather than a regulation.

Bundle 1 List of Text Amendments

Infill Barriers Proposal

- Facilitate Green Renovations to Nonconforming Buildings (reduce barrier) – This change allows expansions to a nonconforming use where the expansion is a sustainable development feature. The term, sustainable development feature is explained to include a list of strategies that conserve water and energy. Thus greater flexibility is allowed where the expansion promotes a sustainable strategy.

Urban Agriculture Proposals

The changes below acknowledge that there already is a growing urban food and community garden movement in Tucson. However, the General Plan and most City sustainable policies so far do not directly promote an urban food policy.

- Define and Clarify Agricultural Uses (reduce barrier) - One impact of this change would be to allow the incidental sales of crops raised on a residential lot. The concept is to allow some flexibility similar to seasonal yard sales.
- Define Community Gardens (reduce barrier) - It will be helpful to clarify what this term applies to in the future.
- Allow Community Gardens as Primary and Accessory Uses (reduce barrier) -The LUC does not mention community gardens as a use. This change will allow, for example, residents to use a vacant nearby lot for a garden. The regulations are based on those from jurisdictions who have already addressed this issue.

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- Allow Farmers' Markets in More Zones (reduce barrier) - Farmers' Markets are treated in the LUC as one of several uses such as swap meets, flea markets, and auctions. This change would separate out farmers' markets with more specific standards than swap meets or flea markets. It is for seasonal activity and supportive of a local urban food policy.
- Allow Accessory Buildings for urban agriculture (reduce barrier) - The change would allow for non-animal uses i.e., greenhouses, within side yards and rear setbacks subject to compatibility standards.

Water Quality and Conservation Proposal

- Define Pervious Materials (reduce barrier) - A definition will better clarify what the expectation is for feature that has potential for rainwater harvesting and reducing local urban heat islands.
- Allow Rainwater Cisterns in Certain Setbacks (reduce barrier) - This amendment clarifies a longstanding zoning interpretation in favor of allowing some flexibility on residential lots for water conservation.

Alternative Energy Proposal

- Electric Vehicle Charging Station (reduce barrier) – While the current LUC gives a parking credit for a station, this amendment more specifically addresses the use of charging stations as a coming trend and weighs the less intrusive nature of this use noting that it can be installed in a variety of locations.

Open Space, Parks and Trails Proposal

- Encourage Organic Mulch in Landscaping Plans (incentive) - This provision clarifies this section of the code that the property owner can choose between organic and inorganic as the situation requires.

Green Buildings Proposal

Regarding cool roofs, there is already an initiative that will be coming forward outside of the sustainable code project, thus it will not be continued in this effort. The clothesline item is more about assuring that subdivision covenants cannot prevent a resident from using a clothesline for drying clothes naturally. The shade structure has an energy efficiency impact and a small amount of flexibility to the setbacks will assure that a shade structure that has no nuisance impact is not undermined unintentionally.

- Encourage Cool Roofs (incentive)

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- Allow clotheslines as accessory use (reduce barrier)
- Allow shade structures in setbacks (reduce barrier)

Attachment:

Phase 2 Code Amendments – Bundle 1 January 2012 Draft

City of Tucson

Sustainable Land Use Code Integration Project



**PHASE 2: CODE AMENDMENTS
BUNDLE #1**

Public Draft: January 2012



C L A R I O N

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Phase 2: Code Amendments- Sustainable Land Use Code Integration Project



PROJECT OVERVIEW

The Sustainable Land Use Code Integration Project is one of a series of projects commissioned by the city's Office of Conservation and Sustainable Development (OCSD) and financed by a Department of Energy (DOE) Energy Efficiency Conservation Block Grant (EECBG).

The purpose of this project, which is being undertaken in collaboration with the city's Planning and Development Services Department (PDSD), is to prepare a sustainability analysis of the Land Use Code (LUC), identify a series of recommended amendments to the LUC, and ultimately to draft amendments that implement the City of Tucson's sustainable goals and policies. The project includes two phases: 1) preparation of a diagnostic report on the status of the current LUC and recommended revisions to better meet the city's sustainability goals; and 2) preparation of text amendments to the city's LUC and other development regulations to better reflect the city's sustainability goals. After review and approval by the City of the diagnostic report's analysis and proposed code amendments, the first phase was completed in April, 2011.

The second phase, which involves the preparation of sustainable code amendments consistent with the diagnostic report, will be divided into three tasks. The purpose of this method is to provide the amendments to the city in manageable installments to avoid overwhelming the community with too much material at once. Each task will provide a "bundle" of proposed code amendments for review by city staff and then consideration by the City Council. Each bundle will address a variety of sustainability issues (e.g., water quality and conservation, alternative energy, etc.) and are not intended to focus on certain topical areas. See below for a more detailed description of this first bundle of code amendments.

MAJOR STAKEHOLDER THEMES

As new sustainability code language is considered for adoption, it is important to remember the comments and insights provided by stakeholders early in the process. The following four major themes emerged from stakeholder interviews and discussions with city staff:

- ***Build on what's already been done***—many stakeholders noted that the city has many other efforts and initiatives underway (or that were recently completed) in support of its sustainability policies; while this effort is focused solely on sustainability as it relates to the LUC specifically, a clear understanding of recent and parallel efforts was necessary to help shape proposed code amendments.
- ***Streamline the process***—stakeholders expressed concern about the lack of predictability in the development review process and the length of time needed to process "unique" projects that may not be consistent with the requirements of the LUC but are consistent with the city's sustainability goals. While it was acknowledged that the city has a variety of tools intended to help provide opportunities for alternative approaches (e.g., Planned Community Development District, Downtown Infill Incentive District, Flexible Lot Development Option, and others,) there was consensus that more could be done generally in the LUC to help encourage more creative and sustainable development practices. In a number of instances, participants indicated that there was a lack of clarity in the LUC about what was desired in different areas of the city and that

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clearer guidance would increase predictability for the development community, property owners, and neighborhood residents.

- *Incorporate new requirements, but offset with incentives and flexibility*—stakeholders acknowledged that in many instances, new requirements would be needed in the LUC to address sustainable development practices; however, it was noted that flexible requirements and/or incentives were preferable to allow applicants to address a particular requirement in the most cost efficient and practical manner for each project. In addition, it was noted that many sustainable technologies (e.g., solar, wind) are advancing and changing very rapidly and that some flexibility should be built into the LUC to allow for administrative approval of new materials and technologies that are equal to or better than what's actually required as these opportunities arise.
- *Address adaptive reuse as well as new development*—a particular challenge noted by stakeholders was that the LUC generally applies the same requirements to the adaptive reuse of an existing building or site and infill development as it would to an undeveloped site. It was noted that this one-size-fits-all approach may reduce the viability of reuse and revitalization on many of the city's more challenging sites.

These themes will serve as a guide for identification of proposed amendments in the three bundles.

RELATED EFFORTS UNDERWAY

Citywide Sustainability Initiatives

In addition to this Sustainable Land Use Code Integration Project, the city has many other current sustainable policies and programs in place or underway and has supported sustainable initiatives for years. The following is a list of some of the more notable non-LUC, sustainable programs the city has initiated or joined in:

- Solar Integration Plan (2009) and Greater Tucson Solar Development Plan (2009)
- Framework for Advancing Sustainability (2008)
- Urban Landscape Framework (2008)
- Mayors' Climate Protection Agreement (MPCA) (2006)
- Creation of the Office of Conservation and Sustainable Development (OCSD) (2006)
- Leadership in Energy and Environmental Design (LEED) (2006)
- Beat the Peak (1976)

Land Use Code Simplification Project

Concurrent with the Sustainable Land Use Code Integration Project, the city is nearly complete with a broader Land Use Code (LUC) Simplification Project. The general purpose of the LUC Simplification Project is to consolidate the requirements of the LUC, most of Chapter 23A Development Compliance Code, and the Development Standards into one new Unified Development Code (UDC) that minimizes redundancy and organizes the code into a more logical, simple, and user-friendly format.

A final draft of the simplified UDC was completed in June 2011, but is undergoing additional staff review and revision before it is released for full public review and consideration for adoption by the City Council. The city's intent is to use the adoption of the reorganized UDC as a springboard to consider broader substantive changes to the code. These subsequent substantive changes would be adopted independent from but coordinated with any substantive code changes resulting from the Sustainable Land Use Code Integration Project.

In recognition of the considerable effort already expended in creating the reorganized UDC and given its expected adoption in the near future, the city has decided that the simplest way to integrate the Phase 2 sustainability amendments into the code is to integrate them into the new UDC format rather than into the

expected-to-be-obsolete LUC format. In addition, given that the UDC has not yet been officially adopted and the city wants to adopt the sustainable amendments as soon as possible (which will likely be before the reorganized UDC is adopted), the city is proposing to adopt all of the sustainability amendments on an interim basis in a single location and document – a new Chapter 23B. Then, after the three bundles of sustainable amendments are adopted into Ch. 23B, and the UDC is presumably adopted, all of the sustainable code amendments would be transferred from Ch. 23B to the UDC and Ch. 23B would be repealed entirely. To facilitate this future transfer, clear cross-references to the affected UDC section(s) will be provided in Ch. 23B to make clear where each amendment would be located in the UDC. If, for any reason, the UDC is not adopted, then all of the sustainable code amendments in Ch. 23B would be incorporated into the current LUC and Ch. 23B would be repealed entirely. Regardless, during the time before the sustainable amendments of the new Ch. 23B are incorporated into either the UDC or LUC, the sustainability provisions of Ch. 23B would be independently applicable and binding on development in the city.

OVERVIEW OF RECOMMENDED CHANGES

Based on a review of city policies and goals, staff identified eleven key sustainability topics as a foundation for the Inventory and Summary of City Sustainability/Energy Efficiency, and Conservation Goals and Policies prepared during Milestone 2 of Phase 1. These topics include:

- Water Quality and Conservation;
- Alternative Energy Production and Energy Conservation;
- Mobility and Transportation and Alternative Fuels;
- Urban Forestry and Urban Heat Island; Housing Accessibility, Diversity, and Affordability;
- Community Health and Safety;
- Food Production and Nutrition; Recycling and Waste Reduction;
- Open Space, Parks, and Trails;
- Green Building; and Climate Change and Air Quality.

In acknowledgement that there can be considerable overlap among some of these categories, such as transportation and climate change, the Diagnosis frequently notes that a strategy to address one issue may apply to another as well. For each topic, the Diagnosis addresses the following:

- *Current regulations* relevant to each topic;
- Potential *barriers* in the LUC, Development Standards, and Design Guideline Manual as well as other sections of the municipal code related to each topic and possible revisions to remove those barriers;
- Potential *incentives* for consideration to encourage alternative energy production and energy conservation; and
- Specific *recommendations to fill regulatory “gaps.”*

Staff reviewed the recommendations in the Diagnosis and provided its input to refine and prioritize the recommendations. Staff’s revised recommendations were organized according to seven topic areas and shared with stakeholders, the Land Use Committee, and the Planning Commission. The narrower range of topic areas defined by staff allows recommendations to be streamlined in terms of their repetition within the Diagnosis and links them to priorities identified by Mayor and Council. Topic areas are listed below, along with an explanation of their relationship to the original eleven topic areas discussed in the body of the Diagnosis where recommendations relate to more than one topic area:

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- *Water Quality and Conservation*;
- *Infill Barriers*—includes recommendations from the Housing Accessibility, Diversity, and Affordability; Mobility and Transportation and Alternative Fuels, and Green Building; and Community Health and Safety sections;
- *Alternative Energy*—includes recommendations from the Alternative Energy Production and Energy Conservation; Climate Change and Air Quality; and Urban Heat Island sections;
- *Urban Food*—includes recommendations from the Food Production and Nutrition and Community Health and Safety;
- *Green Buildings*—includes recommendations from the Green Building and Urban Heat Island sections;
- *Recycling and Waste Reduction*; and
- *Open Space, Parks, and Trails*.

The code amendments proposed in this Bundle #1 are organized according to these seven sustainability categories.

Section 1: Bundle #1 of “Quick Win” Amendments

Bundle #1, unlike the other two bundles of amendments, is divided into two parts. The first part focuses on “quick win” amendments that are high priority changes but appear to be relatively simple and noncontroversial. The intent is to begin the adoption process with amendments that have a high level of community consensus and that will provide a positive foundation for later amendments. This document contains these “quick win” amendments. The second part of Bundle #1, which will be completed in approximately one month, will contain more extensive amendments on more complex issues, such as creating new design standards for mixed use development.

For each proposed sustainable amendment, commentary is included to address: 1) how the amendment relates to a city energy efficiency / conservation goal, as well as to the city’s sustainability objectives identified in the inventory phase of the sustainable code project; 2) a brief summary of the rationale for making the recommended change to the current city LUC/UDC; and 3) a summary of the intent of the proposed amendment (e.g., removal of barriers, creating incentives, or filling regulatory gaps). Where there are multiple proposed code amendments under one category, a single commentary concerning the city’s goals and objectives is provided to reduce redundancy.

In addition to the proposed “quick win” sustainable code amendments, this Bundle #1 includes a research memo that provides additional research on specific sustainable code topics about which the city wanted more data before considering them for possible adoption into the code.

As mentioned above, the intent is to adopt all of the sustainability code amendments into a separate ordinance (Ch. 23B) with cross-references to the affected UDC sections for future integration.

Proposed new language is depicted in red underline. Proposed revisions to existing language are depicted in ~~redline-strikeout~~.

INFILL BARRIERS

Relationship to City’s Goals and Sustainability Objectives

Making “green” renovations and expansions easier to accomplish in the context of nonconforming use and structure regulations will facilitate the retrofitting of existing buildings with new energy-saving technologies and reduce a barrier to sustainable redevelopment. This change would be consistent with and support many of the city’s goals, such as: General Plan Policy 1-10, which seeks to “support continued neighborhood investment;” General Plan Policy 5.4, which seeks to “provide appropriate incentives for infill development;” General Plan Policy 9-2, which seeks to “maximize existing housing resources in the community;” and General Plan Policy 3.3.B, which seeks to “increase the energy efficiency of older residential units.”

Recommendation #1: Facilitate “Green” Renovations/Expansions to Non-Conforming Buildings

Allow “green” renovations/expansions to existing nonconforming buildings (e.g., adding solar panels, insulation, etc.) to take place without bringing entire site or building into compliance with the LUC.

Rationale for Code Change

The current code addresses standards for nonconforming uses and structures in Art. IX Nonconformities. Sec. 9.2.2 Expansion of Nonconforming Use, states, among other things, that all expansion of nonconforming uses shall comply with the UDC standards (e.g., setbacks, parking,

landscaping), and the total amount of expansion cannot exceed 50 percent of the floor area of the existing building or land area devoted to the existing nonconforming use. Sec. 9.3.2 Expansion [Nonconforming Structure] states that any expansions made to nonconforming structures shall be in compliance with current standards but does not include any requirement that expansions of a certain size trigger compliance for all other existing nonconformities on the site. The result is that retrofits to nonconforming uses and structures that integrate sustainable features, some of which may protrude into a setback (e.g., enclosure for a rain barrel or grey water components), are treated the same as ordinary retrofits and thus are not incentivized in any way. The below recommendations seek to provide additional flexibility for green expansions when they involve nonconforming uses and structures.

Type of Code Change

This would reduce a barrier that currently exists in the code because there are no special accommodations for retrofitting nonconforming uses and structures with certain sustainable technologies or facilities.

Proposed Code Amendment

Action 1: Amend Unified Development Code, Sec. 9.2.2.D Expansion of Nonconforming Use, to add the following text:

- D. The amount of expansion does not exceed 50 percent of the floor area of the existing building or land area devoted to the existing nonconforming use, except that expansions of floor area or land area dedicated solely to a sustainable facility, such as a solar array or water recycling tank, shall not be counted as expansion area for purposes of this requirement. Incremental expansions, cumulatively, shall not exceed the 50 percent provision.

Action 2: Amend Unified Development Code, Sec. 9.3.2. Expansion [nonconforming structures], to add the following text:

9.3.2. EXPANSION

- A. Nonconforming structures may continue to be utilized as they existed at the time such structures became nonconforming; however, any expansions made to nonconforming structures from that date shall be in compliance with current standards, with the following exceptions:

1. Parking

Expansions to nonconforming structures that incorporate sustainable development features, as defined below, shall be exempt from meeting current minimum parking requirements and shall trigger no additional compliance requirements related to existing nonconforming parking, if any, on the site.

2. Landscaping

Expansions to nonconforming structures that incorporate sustainable development features, as defined below, shall be subject to the following landscaping standards in lieu of current landscaping standards:

- a. The landowner may install either the required street landscape border or a minimum 3 foot wide landscape border with a 30 inch screen or wall, each consistent with the standards of Sec. 7.6 Landscaping and Screening; and
- b. Landscaping required for vehicular use areas may be reduced by 25 percent.
- c. An expansion using a qualifying sustainable development feature will trigger no additional compliance requirements related to existing nonconforming landscaping, if any, on the site.

3. Sustainable Development Features

For the purposes of determining eligibility for the exceptions outlined above in Sec. 9.3.2.A and B, sustainable development features include the following:

- a. Cool or vegetated roof that covers the entire structure (addition and existing building);
- b. Pervious or cool pavement on over 50 percent of hardscape added for expansion;
- c. Harvested rainwater system that serves the irrigation needs of all landscaping on site;
- d. Solar collection system (e.g., photovoltaic or solar thermal) sufficient to provide power to serve a minimum of 50 percent of the entire structure's heating and cooling needs;
- e. Uses reclaimed water system for landscaping; or
- f. Other sustainable development features that mitigate that provide an equal or superior environmental benefit as those sustainable features listed in a through e above, as determined by the PDSD; or
- g. An addition that achieves LEED Silver Certification or higher or an ENERGY STAR performance score of 75 or higher.

4. Conflict With Other Standards

If there is a conflict between the requirements of this section and other sections of the UDC, then the provisions of this section shall take precedence.

- B. _____ The proposed expansion of a nonconforming building or structure to rebuild any part of a building damaged or demolished due to a government act, such as right-of-way condemnation, shall not count toward the 50 percent expansion standards of Section 9.2.2; however, such new construction shall comply with current Unified Development Code (UDC) standards.

WATER QUALITY AND CONSERVATION

Relationship to City's Goals and Sustainability Objectives

Amending the setback standards to clearly allow rainwater cisterns and other similar water-harvesting systems in side and rear setbacks will conserve potable water by promoting the collection and use of rainwater for landscaping purposes. This change would be consistent with and support many of the city's goals, such as: General Plan Policy 14-17, which seeks to control the amount of stormwater contained in stormwater runoff; General Plan Policy 8-3, which seeks to promote water conservation; and the Tucson/Pima County Phase 2 Final Water and Wastewater Report, which recommends strategies to control potable water demand and encourage smart use of water resources.

Recommendation #2: Allow Rainwater Cisterns in Setbacks

Allow and clarify that rainwater cisterns can encroach into side, rear, and side yard setbacks.

Rationale for Code Change

The current code addresses the standards and setbacks for accessory buildings in multiple places, but most directly in UDC Sec. 4:10 Accessory Uses and Buildings, UDC Sec. 6.4.4 Side, Rear, and Front Yards, and UDC Sec. 6. Accessory Uses and Structures. These sections exempt from setback requirements accessory structures that are less than five feet in height and ten square feet in area. Non-exempt accessory structures in residential zones have a side and rear setback of seven feet and a street setback of 20 feet or the setback of the existing primary use. Those in non-residential zones have to

meet the same setbacks as the primary structure. No special accommodations are made in the code for accessory structures, such as rainwater cisterns, that are above ground and larger than the minimum dimensions needed to be exempt. However, a written interpretation in 2008 from the Zoning Administrator clarifies the setback standards that apply to cisterns. At the direction of staff, we have incorporated the Zoning Administrator's interpretation into the code and made some additions to provide flexibility for cisterns in the front yard setback. Such clarifications and revisions are necessary because the current standards have resulted in enough confusion and concern for landowners and cistern installers that some cisterns are reportedly being installed in setbacks without going through the permitting process to avoid, among other things, the time and expense of getting a variance.

Type of Code Change

This would reduce a barrier that currently exists in the code because accessory structures like rainwater cisterns, which can be difficult to locate on smaller lots, need to have clear, and where appropriate, more flexible, standards to support sustainability goals.

Proposed Code Amendment

Action 1: Amend Unified Development Code, Sec. 6.6.1 Standards for All Zones, to add the following text:

6.6.1. STANDARDS FOR ALL ZONES

In all zones, the structures used for accessory uses shall comply with the following.

A. This section is not intended to apply to buildings of five feet or less in height and ten square feet or less in area, such as doghouses or refuse container enclosures, or to play equipment.¹

B An accessory building shall be developed in conformance with the standards of the principal land use, except as provided by this section and Sec. 6.6.2 below.

C. An accessory structure that exceeds the allowable height of a wall within a perimeter yard and is detached from a principal structure shall comply with the perimeter yard width standards of the principal structure, except that the accessory structure may be built to a parcel line with the consent of the adjoining or, when separated by an alley, adjacent property owner(s).

D. Accessory structures, such as light poles, flagpoles, and other tall and narrow structures that are similar, shall be exempt from the setback requirement.

E. All structures for animals shall be set back at least 50 feet from all property lines, except corrals that shall be set back ten feet from all property lines.

F. The maximum height of a wall or fence within a perimeter yard shall be six feet; however, the wall or fence may be higher than six feet, but no higher than ten feet, if: (See Illustration 6.61-A.).

[skipped text and diagrams]

G. In nonresidential zones, walls or fences, as permitted in **F.** above, may exceed the height standards, provided the wall or fence complies with side and rear yard standards applicable to buildings on the site.

H. For cisterns, the following rules apply:

¹ This is existing LUC text from UDC 4.10.2.D that was relocated to this section where it more properly belongs.

1. A cistern larger than five but less than six feet in height and greater than ten square feet in area may be placed anywhere in the defined side or rear yard with zero setbacks from property lines, and may encroach five feet into a front yard setback if not made of corrugated metal or other reflective material.
3. A cistern over six feet in height is allowed in the defined side or rear yard but must comply with the perimeter yard width requirements applicable to the zone except that the cistern may be built to the property line with the written consent of the adjoining or when separated by an alley, adjacent property owner.
4. A cistern that is part of and integrated into the design of the principal building shall be considered part of the principal building; however, the integrated cistern structure may encroach into a side, rear, or front setback by five feet.

ALTERNATIVE ENERGY

Relationship to City's Goals and Sustainability Objectives

Allowing electric vehicle charging stations as an accessory use to a gas station will promote the use of alternative fuel cars, which will help improve air quality, reduce effects of climate change, and increase access to alternative fuel transportation options. This change would be consistent with and support many of the city's goals, such as: General Plan Policy 14-22, which seeks to implement transportation system changes to facilitate alternative modes of transportation; General Plan Policy 3-1, which seeks to improve mobility by providing more efficient and convenient transportation options; and General Plan Policy 14-25, which seeks to coordinate land uses to improve air quality; and the city's climate action goals to curb greenhouse gases.

Recommendation #3: Allow Electric Vehicle Charging Stations

Allow Level 1 and Level 3 electric vehicle charging stations as an accessory use in all districts and allow Level 3 charging stations as a permitted use in more limited locations.

Rationale for Code Change

The current LUC and related documents do not address requirements or incentive for electric vehicle charging stations. The code, however, does offer a minor incentive for electric vehicles by not counting parking reserved for electric vehicle against required parking. The primary deficiency is that the code does not explicitly state where charging stations for electric vehicles are permitted, possibly discouraging landowners from engaging in this use given the lack of clear and consistent rules to follow. At a minimum, charging stations for electric vehicles should be allowed wherever gas stations are allowed (gas stations are classified as "General Merchandise Sales" in the LUC) given these are essentially the same use, although it may take longer to charge a car than to refuel it. However, unlike gas stations, which are a relatively centralized, industrial-like use using toxic chemicals, charging stations are a relatively clean, quiet, and unobtrusive use that can be installed in dispersed locations with little potential to disturb neighboring uses. The result is that electric vehicle charging stations can be allowed (or required) wherever parking spaces are developed (e.g., parking lots at shopping centers or office parks, or adjacent to on-street parking), or as an accessory use in most zoning districts. The recommendation below is to add Level 1 and Level 2 (low to medium charging) electric vehicle charging stations as an accessory use in all districts and to allow Level 3 charging stations (rapid charging) as a primary use wherever gas stations, rental car agencies, and similar uses are currently allowed.

Type of Code Change

This code change would fill a regulatory gap by adding a new accessory and permitted use to the list of permitted uses in the city.

Proposed Code Amendment

Action 1: Amend Unified Development Code, Sec. 4.8 Use Tables as follows:

Add "Electric vehicle charging station, Level 1 and 2" as an accessory use in all zoning districts.

Action 2: Amend Unified Development Code, Sec. 4.8 Use Tables as follows:

Add "Electric vehicle charging station, Level 3" as a primary use in the following zoning districts: NC, O-2, O-3, RVC, C-1, C-2, C-3, P, MU, OCR-1, OCR-2, P-1, I-1, and I-2.

Action 3: Amend Unified Development Code, Sec. 11.3.11 Utilities Use Group by adding the following two definitions:

Electric Vehicle Charging Station, Level 1 and Level 2

A public or private parking space that is served by battery recharging equipment that can recharge one or more battery electric vehicles, plug-in hybrid electric vehicles, or similar vehicles, and is limited to Level 1 (approximately 15 – 20 amp breaker on a 120-volt AC circuit) and Level 2 (approximately 40 –100 amp breaker on a 208 – 240-volt AC circuit) charging stations.

Electric Vehicle Charging Station, Level 3

A public or private parking space that is served by battery recharging equipment that can recharge one or more battery electric vehicles, plug-in hybrid electric vehicles, or similar vehicles, and use is limited to Level 3 (approximately 40 amp dedicated breaker on a 480-volt AC circuit, or anything higher than a Level 2 charging station). This use also includes battery exchange facilities that allow vehicles with swappable electric batteries to exchange a depleted battery for a fully charged battery.

URBAN FOOD

Relationship to City's Goals and Sustainability Objectives

Although there is growing urban food and community garden movement in Tucson, neither the city's General Plan, the Framework for Advancing Sustainability, the Urban Landscape Framework, nor any other major city policy document directly identifies or promotes an urban food policy. However, the proposed code changes below regarding the sale of crops from gardens, community gardens, and farmer's markets, will facilitate local food production in ways that will indirectly support other related city sustainability goals and objectives. For example, these changes will generally support the city's goals to 1) reduce energy consumption by reducing dependency on fossil fuels required to transport food grown in distant locations; 2) preserve open space by providing a productive use for underutilized land; and 3) enhance community health by enabling greater access to healthy, fresh foods.

Recommendation #4: Clarify Rules for Sale of Crops from Gardens

Allow the incidental sale of crops grown on-site as an accessory use to a Family Dwelling use as a new type of Home Occupation.

Rationale for Code Change

The current code allows a variety of Home Occupation uses (e.g., Day Care, Group Dwelling, etc.). If the goal is to allow the incidental sale of crops grown on the site to outside customers in conjunction with a Family Dwelling, then the most straightforward approach is to regulate this new use as a Home Occupation. However, given that one current use-specific standard for all General Home Occupations is

that “[g]oods not be sold on the premises,” the proposed “Home Crop Sales Home Occupation” would be intentionally exempted from this condition to allow the sale of goods from a home garden.

Type of Code Change

This amendment would reduce a barrier that currently exists in the UDC that prohibits the incidental sale of home-grown crops from personal residences.

Proposed Code Amendment

Action 1: Amend Unified Development Code, Section 4.8 Use Table to add “Family Dwelling with Home Crop Sales Home Occupation” as a new and separate accessory use in all zoning districts in which a “Family Dwelling with General Home Occupation” is allowed.

Action2: Amend Unified Development Code, Section 4.8 Use Table to reference Sec. 4.9.7.E.1 – 5, 7 – 10, and 12 – 13 as use specific standards for the new “Family Dwelling with Home Crop Sales Home Occupation” for all zoning districts in which the use is allowed.

Action 3: Amend Unified Development Code, Section 11.4.9 Other Terms Defined, to add the following:

Home Crop Sales

The incidental sale of crops grown on-site in conjunction with a Family Dwelling use. The sale of animal products, except for eggs and honey, is prohibited.

Recommendation #5: Clarify Rules for Community Gardens

Add a definition for “Community Garden” and allow it as a primary use in residential districts and as an accessory use in other districts.

Rationale for Code Change

The current code does not define or mention community gardens as a permitted use. The result is that residents wanting to establish a community garden on a vacant or partially developed lot, in an open space area of a subdivision, or on public land are not sure whether it is permitted and what conditions might apply. The city’s current practice is generally supportive of community gardens and allows them in most of the above instances, but the on-site sale is not usually allowed, which can be a significant barrier to sustainable local food production. Thus, explicitly defining and permitting community gardens like other primary and accessory uses not only provides better notice to the community of where community gardens are allowed but more clearly sanctions (with limitations) their use.

Type of Code Change

This would reduce a barrier that currently exists in the code because an important local food production option is not clearly defined or regulated.

Proposed Code Amendment

Action 1: Amend Unified Development Code, Sec. 11.3.2 Agricultural Use Group as follows:

Community Garden

A public or not-for-profit area for cultivation of fruits, flowers, vegetables, or ornamental plants by more than one person or family, and may include composting areas and the incidental sales of products cultivated on-site.

Action 2: Amend Unified Development Code, Sec. 4.8 Use Tables as follows:

Add "Community Garden" as a new row in each use table in which the use is allowed either as a primary use or accessory use. We recommend "Community Garden" be added as a primary and accessory use in every zoning district except (IR) Institutional Reserve and (P) Parking.

Action 3: Amend UDC Sec. 4.9.2 [Use-Specific Standards] to address neighborhood compatibility issues (e.g., traffic, noise, hours of operation, etc.) related to community gardens by adding the following use-specific standards:

- (a) The incidental sales of crops shall be limited to the hours of 7 a.m. to 8 p.m.
- (b) Community gardens shall be exempt from parking requirements, unless the Director determines level of sales necessitates off-street parking.
- (c) Fencing of community gardens shall be no greater than six feet in height and be no more than 40 percent opacity.
- (d) Composting areas shall be actively managed to control odors, pests, and all other potential nuisances to neighbors or the city may require termination of the composting activity.
- (e) Accessory structures are permitted pursuant to the standards in UDC Sec. 4.10 Accessory Uses and Buildings.

Recommendation #6: Clarify and Encourage Farmer's Markets

Make "Farmer's Market" a distinct use, allow it in a broader set of zone districts as a primary use, and provide use-specific standards as necessary.

Rationale for Code Change

The current code treats farmer's markets one type of use within the "Swap Meet and Auction" use class in the "Retail Trade Use Group." Other uses included in this category include flea markets. In terms of supporting sustainable practices, the city should consider encouraging farmer's markets more aggressively than flea markets and auctions, however, doing so is difficult when all of these uses are regulated as the same use. Therefore, the use of "farmer's market" should become an independent and distinct use to enable the city to allow, for example, farmer's markets in a broader set of zoning districts (perhaps with use-specific standards) than generic flea markets or swap meets. The new definition for "Farmer's Market" would essentially be the same as it currently exists under the "Swap Meet and Auction" use class but the separate definition will allow "Farmer's market" to be added as a separate use in the use tables and be administered independently in the future.

Type of Code Change

This would reduce a barrier that currently exists in the code because an important local food production option is not clearly defined or regulated.

Proposed Code Amendment

Action 1: Amend Unified Development Code, Sec. 11.3.2.C Retail Trade Use Group to add a definition as follows:

Farmer's Market

Occasional or periodic commercial activities held in an open or covered area where groups of sellers rent space on a short-term basis for the primary purpose of displaying, bartering, or selling food products, with accessory display, bartering, and sale of crafts and related items, to the public and, at least 20 percent of the farmer's market space does not occupy the same allotted area on an uninterrupted, continuous, daily basis for the purpose of display and sale, exchange, or barter of merchandise.

Action 2: Amend Unified Development Code, Sec. 4.8 Use Tables as follows:

Add "Farmer's Market" as a primary use in the following zoning districts: C-2, C-3, I-2 (no change from current code) and to C-1, MU, OCR-1, OCR-2, I-1, P-1, PAD, PCD (Note: red underlined text in this paragraph indicates allowing use in a new district or changing use from a special exception use to a primary use).

Action 3: Amend Unified Development Code, Sec. 4.9.9 [Use-specific Standards for Retail Use Group] to specifically address farmer's markets as follows:

(a) A farmers market may not be operated more than 28 days in a calendar year and may not be operated on consecutive days.

(b) A farmers market may only be operated between the hours of 7:30 a.m. and 7 p.m. on any day of the week.

(c) No more than 60 vendors may participate in a farmers market. Each stall area used by a vendor may not exceed 20 feet by 20 feet.

(d) All litter, tents, stalls, food, merchandise, and other evidence of the farmers market shall be removed from the premises at the end of each market day.

(e) Craft-related product sales must be clearly incidental to sale of food products.

GREEN BUILDINGS

Relationship to City's Goals and Sustainability Objectives

Allowing and encouraging the use of green building features, such as shade structures, cool roofs, and clotheslines, that are designed to reduce energy consumption, greenhouse gas emissions, and the urban heat island effect will help make Tucson a more sustainable and livable community. The city's General Plan, the Framework for Advancing Sustainability, the Urban Landscape Framework do not address any of these green building techniques in much detail but they do provide general support for such green measures that would support the community's broader goals to conserve energy and promote green building. For example, these changes will support 1) General Plan Policy 14-39, which seeks to "support programs that reduce energy consumption and improve sustainability in housing; 2) General Plan Policy 3.3.B, which seeks to "encourage the use of energy efficient design in new affordable housing and support programs to increase the energy efficient of older residential units;" and 3) the Framework for Advancing Sustainability, which includes an initiative to increase the energy efficiency of existing buildings.

Recommendation #7: Allow Shade Structures in Setbacks

Allow exterior window shades, awnings, roof overhangs, and other appropriate shade structures to encroach into setbacks.

Rationale for Code Change

UDC Section 6.6.4.B addresses encroachments into side, rear, and street setbacks by projections from structures. Among other things, it allows roof overhangs to encroach two feet into each setback. No other shade-related projections, such as exterior window shades, awnings, and other solar-oriented architectural features are addressed. This means such features are not permitted to encroach into any setbacks, which significantly limits opportunities to integrate sustainable shading techniques into new and existing buildings that will help reduce the urban heat island effect and create a more pleasant pedestrian experience. A greater encroachment (i.e., five feet instead of two feet) is proposed for

awnings in the street setbacks because such awnings would likely be intended to provide shade for pedestrians and would need additional width to serve this function.

Type of Code Change

This would reduce a barrier that currently exists in the code because certain architectural shade features are not allowed to project into side, rear, and front setbacks.

Proposed Code Amendment

Action 1: Amend Unified Development Code, Sec. 6.6.4.B.1 Side and Rear Property Lines [encroachments] and Sec. 6.6.4.B.2 Front Property Lines [encroachments], to add the following text:

B. Exceptions

Encroachment into the required perimeter yard shall be allowed as provided below.

1. Side and Rear Property Lines

Along interior property lines, the following may extend two feet into the required width, provided the side or rear yard is not reduced to less than three feet.

- a. Chimney.
- b. Roof overhang.
- c. Bay window.
- d. External shade covering (e.g., window shade, awning).
- e. Wall-mounted solar collectors.

2. Street Property Lines

Along street property lines, the following may extend into the required width as provided below.

- a. The following may extend two feet into the required street yard.
 - (1) Chimney.
 - (2) Roof overhang.
 - (3) Stairs.
 - (4) Bay window.
 - (5) Open structures.
 - (6) Window shade.
- b. On any corner lot, no fence, structure, object, or planting shall be erected or maintained to interfere with the sight visibility triangle provisions set forth in the Technical Manual.
- c. An awning may project five feet into the street setback.

Recommendation #8: Allow Clotheslines as Accessory Use

Prohibit limitations on clotheslines in subdivision Covenants, Conditions, and Restrictions (CC&Rs) and specifically allow as an accessory use in all zone districts, especially residential districts.

Rationale for Code Change

No section of the current code addresses the use or provides standards for outdoor clotheslines in the city. There is also no apparent prohibition or barrier to their use, thus residents appear to be free to use clotheslines in residential and nonresidential districts if the desire. However, in some communities, clotheslines have become an issue of controversy over concerns about their perceived visual impacts. Consequently, some subdivision CC&Rs prohibit them outright. However, drying clothes naturally on a clothesline is an inexpensive and energy-free way to dry clothes that uses no fossil fuels. Thus, if the city wants to ensure that clotheslines remain an option for households, especially the without the means to own an automatic clothes dryer, then it should explicitly allow clotheslines in the code and prohibit subdivisions from prohibiting clotheslines in their CC&Rs.

Type of Code Change

This would reduce a barrier that currently exists in the code because the code's silence on clotheslines leaves room for, for example, subdivisions to adopt CC&Rs that prohibit their use.

Proposed Code Amendment

Action 1: Amend Unified Development Code, Sec. 4.10.2 Accessory Buildings, to add the following text:

4.10.2. ACCESSORY BUILDINGS

In all zones, the buildings used for accessory uses shall comply with the following.

- A. An accessory building shall be built only on a lot occupied by a principal building or use.
- B. An accessory building, except for a stable or enclosure for animals, may be attached to a principal building, provided that its construction complies with the development requirements of the principal building.
- C. The use of solar energy collectors for the purpose of providing energy for heating or cooling shall be permitted in all zones, whether as part of a principal building or as an accessory building. Such solar collection devices shall not be included in computing lot coverage.
- D. This section is not intended to apply to buildings of five feet or less in height and ten square feet or less in area, such as doghouses or refuse container enclosures, or to play equipment.

E. Outdoor clotheslines, including freestanding clothesline structures, shall be permitted in all zones and shall not be prohibited by the CC&Rs of any subdivision within the city approved after the date of [adoption of this ordinance].

RECYCLING AND WASTE REDUCTION

Relationship to City's Goals and Sustainability Objectives

Neither the city's General Plan, the Framework for Advancing Sustainability, the Urban Landscape Framework, nor any other major city policy document directly addresses the issue of the use of organic mulches in landscaping. However, allowing this type of ground cover in landscaped areas will provide a more natural, bio-degradable, and moisture-retaining material than pebbles are larger rocks and so will indirectly support other related sustainability goals and objectives of the city. For example, this change

will support 1) General Plan Policy 8-3, which seeks to promote water conservation; 2) the Phase 2 Final Water and Wastewater Report, which strongly encourages measures that lower demand for potable water; and 3) the Urban Landscape Framework, which promotes a more sustainable urban landscape.

Recommendation #9: Encourage Organic Mulch in Landscaping Plans

Clarify that organic mulches can be used as a ground cover in landscaping plans wherever inorganic ground cover is permitted. Organic mulches are often a more sustainable, local, and low-energy ground cover than gravel and rock.

Rationale for Code Change

The current code is confusing but appears to be very restrictive on the use of organic mulches as ground cover in association with required landscaped areas. For example, UDC Sec. 7.6.4.C.2.d Inorganic Ground Cover, allows only the use of inorganic ground cover (e.g., decomposed granite) in landscaped areas in the public ROW, but has a general reference to certain exceptions that are not clearly identified. Similarly, while the introduction to UDC Sec. 7.6.4.F Plant Cover / Dust Control generally allows both organic and inorganic materials for disturbed areas not intended for vegetative ground cover, three of the four provisions in that section expressly prohibit the use of organic ground cover (which seems to cover most situations) while the fourth provision (which is taken from the Development Standards) seems to allow organic ground cover with few limitations. In short, the current regulations pertaining to the use of organic and inorganic mulches are confusing and need not only to be clarified but modified to encourage the use of organic mulches. Based on staff input, we recommend that the code's current distinction between "organic" and "inorganic" groundcover be eliminated and replaced with the single term "ground cover," allowing landowners to choose whichever type of ground cover they prefer, subject to city approval.

Type of Code Change

This would reduce a barrier that currently exists in the code that discourages and often prohibits the use of organic mulches.

Proposed Code Amendment

Action 1: Amend Unified Development Code, 7.6.4.C.2.d, Inorganic Ground Cover, to add the following text:

- d. ~~Inorganic~~ Ground Cover

Except as otherwise provided by this section, the area between the right-of-way line and sidewalk and the area between the sidewalk and the curb, if not covered with vegetation, shall be covered with an appropriate ~~inorganic~~ ground cover, ~~such as decomposed granite~~.

Action 2: Amend Unified Development Code, 7.6.4.F Plant Cover / Dust Control, to add the following text:

- F. Plant Cover/Dust Control

All disturbed, grubbed, graded, or bladed areas not otherwise improved shall be landscaped, reseeded, or treated with a layer of ~~inorganic or organic appropriate~~ ground cover to help reduce dust pollution.

1. Ground surfaces in planting beds, planters, medians, or tree understory within a landscaped area that are not covered with shrubs, accent plants, vines, ~~vegetative~~ ground cover, or other vegetation from the Drought Tolerant Plant List shall be treated with an ~~inorganic appropriate~~ ground cover, ~~except that organic ground cover (e.g., mulch) may be used to cover areas over the root zone of planted vegetation~~.

2. Unless maintained as undisturbed natural desert, all portions of a site not occupied by buildings, structures, vehicular use areas, oasis areas, pedestrian circulation areas, or required landscape elements shall be landscaped with vegetation from the Drought Tolerant Plant List, reseeded with a native seed mix, or treated with an ~~inorganic appropriate~~ ground cover and maintained in a clean condition, ~~except that organic ground cover (e.g., mulch) may be used to cover areas over the root zone of planted vegetation.~~
3. Unless maintained as undisturbed natural desert, future building pads within a phased development shall be temporarily landscaped with vegetation from the Drought-Tolerant Plant List, reseeded with a native seed mix, or treated with an appropriate ~~inorganic~~ ground cover and maintained in a clean condition as required by Sec. 7003(e) of the Uniform Building Code (UBC), ~~except that organic ground cover (e.g., mulch) may be used to cover areas over the root zone of planted vegetation.~~
4. ~~Where organic and inorganic ground cover are is permitted, if vegetative ground cover is not intended,~~ a minimum two-inch layer of organic or inorganic material (i.e., decomposed granite, rock mulch, or other material) will be used as ground cover under and around the vegetation in landscaped areas to help cool soil areas, reduce evaporation, and retard weed growth. Existing areas of undisturbed native vegetation retained on the site are not required to have the soil mulched or amended.

Action 3: Amend Unified Development Code, Sec.11.4.8 Other Terms Defined, to add the following definition:

Ground Cover

An organic (e.g., bark mulch) or inorganic (e.g., decomposed granite) material placed on unvegetated ground to help stabilize and protect the soil by, among other things, minimizing soil erosion and retaining soil moisture.

Action 4: Replace, as appropriate, all occurrences of the words “organic” and “inorganic” ground cover in the UDC with the more general term “ground cover.”

OPEN SPACE, PARKS, AND TRAILS

Relationship to City’s Goals and Sustainability Objectives

The city’s General Plan, the Framework for Advancing Sustainability, the Urban Landscape Framework, all address the need to create new types of active and passive open space areas and protect existing natural features and open spaces. In most cases, the context for creating or promoting open space is to provide recreational opportunities to residents or to protect scenic areas, sensitive habitats, and water resources from development. There is, however, little detail on how protected open space should be used, especially in more urban settings, or what kind of alternative uses are consistent with open space values. Thus, by clarifying that less traditional forms of open space, such as rooftop gardens, vegetated roofs, and community gardens may count as required open space, an incentive will be created for these sustainable practices and provide flexibility to landowners in developing their property. It will also support other related city sustainability goals and objectives. For example, this change will support 1) Policy 14-4, which seeks to “promote the development and management of healthy and attractive urban vegetation;” 2) General Plan Policy 14-17, which seeks to “control the amount of pollutants entrained in stormwater runoff;” and 3) General Plan Policy 14-39, which seeks to “support programs that reduce energy consumptions and improve sustainability in housing.”

Recommendation #10: Allow Alternative Forms of Open Space

Clarify that alternative forms of open space (e.g., roof top gardens, vegetated roofs, and/or community gardens) may be counted towards required open space.

Rationale for Code Change

The current code does not address open space requirements for new development or subdivisions in a consolidated or clear way. Instead, open space is mentioned throughout the code in a variety of contexts, such as contributing to existing recreational needs, providing urban amenities, (e.g., plazas), and protecting sensitive natural resources or scenic vistas. Nearly every overlay in the UDC Article 5 mentions open space as a development consideration or requirement in some context, such as in the Rio Nuevo and Downtown Zone (RND) and the Flexible Lot Development (FLD) option. Complicating matters further, there are six definitions ~~(See below)~~ for various types of open space in the UDC that overlap and which that are not always used distinctly or consistently in the code. It is our understanding that staff is currently reviewing these definitions for possible revisions and so we will ensure that any changes proposed below are coordinated with the staff.

Type of Code Change

This would reduce a barrier that currently exists in the code because sustainable forms of green space are not clearly allowed in areas otherwise reserved or required for open space.

Proposed Code Amendment

Given the confusion created by the multiple definitions of open space, the simplest approach for the purposes of this project is to amend the definition of "~~F~~unctional ~~e~~Open ~~s~~Space" to make clear that certain sustainable forms of green space, such as rooftop gardens and community gardens, will count as required open space. This approach would exclude such sustainable green spaces from being used in places where genuine "natural open space" is the goal because a community garden is inconsistent with areas intended to remain natural or wild.

| **Action 1:** Amend Unified Development Code, 11.4.7 -Definitions - F, Functional Open Space, to add the following text:

Functional Open Space

Open space that is a designed element of the development and has a functionally described and planned use as an active or passive recreational amenity for the direct benefit of the residents and guests of the development. Man-made impervious surfaces shall not exceed three (3) percent within areas so designated. Examples include: landscaped areas which provide visual relief, shade, screening, buffering, and other environmental amenities; nature trails; exercise trails; active recreation areas (e.g., playgrounds, baseball fields, multiuse areas); picnic areas and facilities; recreation areas and facilities (e.g., swimming pools, tennis courts; golf courses), community gardens, vegetated roofs, and other similar vegetated areas.

Action 2: Amend Unified Development Code, 11.4.7 Definitions - V, to add the following text:

Vegetated Roof

A roof that is covered with planted, potted, or containerized vegetation over 50% of its surface, and has appropriate systems for drainage and other maintenance requirements.

Presentation by: Merrill Eisenberg

Policy Brief:

SUPPORTING URBAN AGRICULTURE: RAISING CHICKENS AND SMALL ANIMALS IN TUCSON NEIGHBORHOODS

Executive Summary

Tucson is currently seeking to revise its Land Use Code to address issues of sustainability. One aspect of sustainability is designing communities that utilize natural systems to provide important lifestyle and environmental supports that make a community a good place to live. Urban agriculture is emerging as one way to support the dietary, recreational, and civic engagement needs of urban populations.

Urban agriculture can be defined as "... the growing, processing, and distribution of food and nonfood plant and tree crops and the raising of livestock, directly for the urban market, both within and on the fringe of an urban area".ⁱ Within a city, urban agriculture can occur both on private and public properties, including residential backyard gardens, urban farms run by nonprofit organizations or for-profit businesses, community gardens supported through county park and recreation programs, school gardens, and rooftop plots on buildings.ⁱⁱ Individuals can also raise crops and animals for household food purposes, and sell the surplus to others.

The Tucson City Code and Land Use Code currently regulate keeping animals for agricultural purposes within city limits. The City Code provides some specific rules for keeping chickens and other fowl, as well as sanitation and humane treatment rules for all animals; the Land Use Code identifies zones where agricultural activities may be conducted and establishes rules for structures and setbacks for all animals.

The current rules are not supportive of urban agriculture because they limit where animals can be kept and require setbacks that preclude keeping animals on most urban residential properties. Nevertheless, there is considerable and growing interest in raising chickens, miniature goats, and other small animals for food purposes among Tucson residents. Restrictions on where small farm animals and fowl may be kept are largely ignored; chickens and miniature goats are currently being kept in many residential areas where they are prohibited. Although the zoning laws preclude it, shelters for animals are often located along lot lines to allow property line walls and fences to provide one or two sides of the enclosure.

Enforcement of the rules is done on a complaint basis. According to the enforcement authorities (Tucson Policy Department and Pima County Animal Control), there have been very few complaints about the chickens or miniature goats that are currently being kept in urban residential areas.

Other communities have zoning rules and ordinances that are explicitly supportive of urban agriculture, and that permit keeping chickens and other small animals in urban residential areas. These communities report few problems with enforcement issues.

A review of the policies that guide keeping animals for food in these communities revealed that the following topics are commonly addressed:

1. The number of chickens permitted
2. Requirements for permits or licenses
3. Requirements for neighbor consent
4. Noise control
5. Requirements for enclosure
6. Enclosure size requirements
7. Sanitation
8. Placement of enclosures
9. Treatment of animals
10. Enforcement

The Tucson City and Zoning codes currently address several of the ten components listed above. For example, the number of chickens, noise control, sanitation, treatment of animals and enforcement are addressed in Chapter 4 of the City Code. Other components are either addressed to some extent, or not currently addressed in Tucson codes. Restrictions in the Zoning Code preclude keeping animals in most urban areas. The current codes are difficult to interpret and confusing for residents trying to determine what is permitted.

City Code and Zoning rules that support urban agriculture must address not just chickens, but the full complement of animals that might be kept for food purposes. The types of animals that are permitted for food production purposes in urban areas should be clearly defined. The ten policy components listed above should apply to all animals.

The concept of “animal units,” which is commonly used to determine the number of animals a parcel of grazing land can support, can be modified for purposes of setting limits on the total number of animals that are permitted in urban areas. A specific number of animal units can be set by zone, and animals can be assigned a unit weight.

RECOMMENDATIONS

Recommendations for creating a policy environment that is supportive of urban agriculture, and particularly for keeping animals for food purposes in urban areas are based on the following:

- The benefits of urban agriculture, particularly as a strategy to foster self-reliance, public health, and community sustainability
- Existing ordinances that regulate chicken and animal keeping
- Social norms in Tucson: current practice and experience regarding compatibility and complaints
- Feedback from current residents who keep chickens
- Experience in other similar communities
- Anticipated concerns from the public
- “If it ain’t broke, don’t fix it” – e.g. no proposed rules that are more restrictive than what we have now if there has been no problem.

Based on these above criteria, the following recommendations are made for changes and/or additions to the Tucson City Code and Tucson Land Use Code:

1. Clearly define “animals” in the Tucson Land Use Code and Tucson City Code as follows:

Table 7: Definitions			
Animal			
Any fowl, reptile, amphibian or mammal, except human beings			
Large Animals		Small Animals	
Ratite Large, flightless birds, including emus and ostriches	Livestock Cattle, horses, sheep, oxen, donkeys, mules, llamas, and other similar animals	Small Farm Animals Miniature goats, rabbits, rodents, and other similar animals	Fowl A bird that is used to produce meat or eggs, including, but not limited to chickens, ducks, turkeys

2. Create the following structure for the Agricultural Land Use Group in the Land Use Code. Permit small farm animals and fowl in urban residential zones.

Agricultural Land Use Group			
Rural and Peri-urban (for commercial and personal use)		Urban (primarily for personal use)	
Crop Production	Animal Production	Gardening	Animals
			Permit small farm animals only (see above definition)

2. Limit the number of small farm animals permitted by creating Urban Animal Units (UAAUs) in the Land Use Code:

Small Farm Animals and Fowl	Units per animal
Chickens	.1
Ducks	.2
Turkeys or geese	.4
Miniature goat	.5
Rabbits	.1
Rodents (guinea pigs)	.1

4. The number of UAAUs permitted in residential zones should be:

Zone	Description	UAAUs Permitted
R-1	Low density single family	2
R-2	Medium density single and multiple family	1.5
R-3	High density residential and compatible uses	1

Examples of mixed-animal keeping under this scheme could include:

	<u>Scenario 1</u>	<u>Scenario 2</u>	<u>Scenario 3</u>	<u>Scenario 4</u>
R-1 (2 UAAUs)	20 chickens	10 chickens 2 goats	5 chickens 2 goats 1 turkey	3 chickens 2 goats 1 turkey 3 rabbits
R-2 (1.5 UAAUs)	15 chickens	10 chickens 1 goat	7 chickens 2 ducks 1 turkey	3 chickens 6 rabbits 3 ducks
R-3 (1 UAAU)	10 chickens	5 chickens 1 goat	2 chickens 1 turkey 2 ducks	2 goats

UAAU limits should also be developed for other urban zones where family dwellings are a permitted use.

5. **Address the other components of an urban animal policy as follows:** (existing code citations that address each element are shown; recommendations in **bold** require code revision.)

Urban Animal Policy Components			
Element	City Code	Zoning Code	Recommendations
Permits		X	For additional animals
Neighbor consent		X	For permits/additional animals
Noise	X		16-31(b)3: no audible sound beyond the property line 4-59: No roosters
Enclosure requirements	X		4-3.2(c)) requires shelter to be provided for all animals; 4-21 prohibits the following animals from running at large: horse, colt, mule, donkey, burro, ox, bull, cow, calf, hog, pig, sheep, goat or other large or dangerous animals. 4-22 prohibits livestock from grazing or pasturing in the city except on land owned by the animal's owner 4-55: Prohibits fowl from running at large . <i>cont...</i> Clarify that 4-21 also applies to small farm animals and fowl
Yard restrictions			Not necessary
Setbacks: Neighboring residence	X	X	4.57 Fowl must be 50 ft from any dwelling 20 ft for all animals and fowl
Setbacks: Property line		X	None required; allows for the back and side fences to be the boundary.

Urban Animal Policy Components

Element	City Code	Zoning Code	Recommendations
Humane Treatment	X		4-3.2(c) Cruelty and neglect ordinance
Sanitation	X		4-3.2) Cruelty and neglect ordinance requires “healthy environments” 4-58: Fowl must be kept in clean and sanitary conditions
Enforcement	X		4-1: In General: any peace officer or county animal control officer enforces the provisions of Chapter 4: Animals and Fowl and can issue citations for violations. 4-10: Authority to remove and impound animals 4-11: Procedure to remove and forfeit animals 4-61: Fowl violations not less than \$50 or more than \$1,000; may include not more than 6 months in jail and not more than 3 years probation or any combination thereof; abatement may be ordered 16-31(b)3: Any peace officer or any county animal control officer is hereby authorized to issue citations to owners for any violation of noise rules.

References

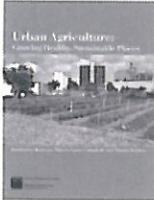
- ⁱ Mougeot, LJA. Urban Agriculture: Definition, Presence, and Potentials and Risks. Thematic Paper 1. Accessed online: <https://docs.google.com/viewer?url=http%3A%2F%2Fwww.arch.mcgill.ca%2Fprof%2Fluka%2Furbandesig%2Fhousing%2FARCH604%2FMougeot2000.pdf>
- ⁱⁱ Lachance, Jonathan. “Supporting Urban Agriculture: A Proposed Supplement to the City of Detroit Master Plan of Policies.” University of Michigan Taubman College of Architecture and Urban Planning, April 2004.

+ Planning for Urban Agriculture in Tucson, Arizona



Merrill Eisenberg, Ph.D.
Zuckerman College of Public Health

+ Urban Agriculture – a growing trend in US cities



Albuquerque NM
Las Cruces NM
Los Angeles CA
San Francisco CA
Santa Cruz CA
Portland OR
Seattle WA
Denver CO
Fort Collins CO
Grand Junction CO
Austin TX
Dallas TX
Gainesville FL
Miami FL
St. Petersburg FL

Atlanta GA
Richmond VA
Cincinnati OH
Cleveland OH
Minneapolis MN
Duluth MN
Madison WI
Milwaukee WI
Chicago IL
Urbana IL
New York, NY
Philadelphia PA
Pittsburgh PA
Boston MA
Providence RI

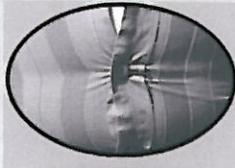
"...a cornerstone to efforts to make themselves healthier and more sustainable."

+ Why urban agriculture?

"... the growing, processing, and distribution of food and nonfood plant and tree crops and the raising of livestock, directly for the urban market, both within and on the fringe of an urban area".

Public health and urban agriculture

- Obesity prevention
- Access to healthy food
- Physical activity
- Community cohesion and neighborhood development



Other benefits of urban agriculture

- Economic development
 - Household self-sufficiency
 - Small scale sale of products (food and compost)
 - Property values increase in neighborhoods with community gardens
- Community sustainability
 - Food security
 - Vacant lots
 - Green space and heat island mitigation
 - Carbon footprint of the food system
 - Build community cohesion, reduce crime
- Educational

+ What does urban agriculture look like?

- Production
- Manufacturing
- Sale/Distribution
- Waste Management



+ Production

- Backyard gardens
- Community gardens
- School gardens
- Small scale farming
- Keeping fowl and small farm animals
- Aquaculture
- Hydroponics



+ Manufacturing

- Any preparation, including washing, of food produced.
- Governed by the Pima County Food Code
 - Licensed kitchens
 - Requirements for food handlers
 - Regular inspections
- Enforced by the Pima County Health Department

+ Sale and distribution

- State law: growers can sell any product directly to the consumer
- Food Code: Licensed food establishments must use foods from an acceptable source
- LUC Retail Use Group: where retail sales can occur
- City Code: vendor permits and tax issues

+ Waste Management / Composting

- City Code: Neighborhood Preservation (16-13)
 - Permitted on residential property
 - Must be contained
 - Must be maintained to not produce odors or attract vermin
 - Located so it is not visible from street or abutting properties
- LUC: Not mentioned

+

What has been happening in the Tucson Area?



+ Promoting Urban Agriculture in Tucson

- Community Food Bank, Food Security Center
- Tucson Community Gardens
- Tucson Community Supported Agriculture
- Sustainable Tucson
- Desert Harvesters
- Tucson Village Farm
- Baja Arizona Sustainable Agriculture
- Santa Cruz Valley Heritage Alliance
- Native Seeds/SEARCH
- Pima County Food Systems Alliance
- Sonoran Permaculture Guild
- Slow Food Tucson

Communities Putting Prevention to Work (CPPW)
Obesity prevention through policy, systems, and environmental change

- MEZCOPH
- Community Food Bank
- Drachman Institute
- Pima County Food Systems Alliance
- Tucson Community Gardens

- What are the rules? Fact Sheets for the public
- Sustainable zoning code project
- Research on policy and enforcement issues in other communities

+

What general public policy issues does urban agriculture raise?

- Public Health
- Land Use and Compatibility
- Public Concerns

Public health issues

- Food safety and sanitation
 - State statute allows any grower to sell directly to any consumer
 - Pima County Food Code (Pima County Health Department)
 - Best practices: GHP/GAP
 - FDA is developing regulations for small producers

Land use and compatibility Issues

- Noise and nuisance concerns *✓Some are already addressed*
- Setbacks for accessory buildings, sheds, coops and shelters, water harvesting infrastructure *✓Some are addressed but need tweaking*
- Where can you sell locally grown food? *✓Some require new policy development*

+ *Common community concerns:*

Noise controlled by
Odors City Ordinance
Vermin

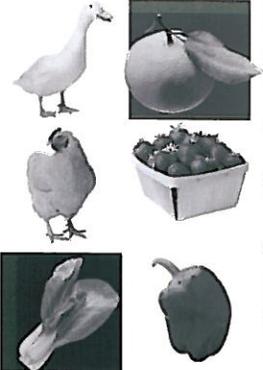
Property Values:
"...community gardens have, on average, significant positive effects on surrounding property values, and that those effects are driven by the poorest of host neighborhoods (where a garden raises neighboring property values by as much as 9.4 percentage points within five years of the garden's opening)."




+

Context for urban agriculture land use policy in Tucson

Current Land Use Code



**+ Zoning Code Structure for Agricultural Activity
Agricultural Land Use Group (LUC 3.5.2)**

Includes Land Use Classes which involve the commercial production of crops and animals.

<u>Crop Production</u>	<u>Animal Production</u>	<u>General Farming</u>
The growing and harvesting of agricultural products to provide food, fiber, and/or horticultural vegetation for ornamental purposes. Typical uses include the growing of field crops, fruit and nut orchards, nurseries, and greenhouse operations.	The keeping, grazing, feeding, and breeding of animals by the property owner or occupant for commercial gain. Typical uses include horse ranches and dairy, poultry, and rabbit farms.	Any combination of Animal and Crop Production limited to personal use. Stockyards The temporary confinement of livestock in conjunction with their transport, fattening, or auctioning on a wholesale or retail basis. Typical uses include feedlots and cattle pens.

+ What uses are permitted in urban residential zones?

Zone	Crop Production*	Animal Production**	General Farming***	Minimum lot size (sq. ft.)
RX-1	P	P	P	36,000
RX-2	P	-	-	16,000
R-1	P	-	-	7,000-10,000
R-2	P	-	-	5,000
R-3	P	-	-	??
MH-1	P	-	-	7,000
MH-2	P	-	-	5,000

P=Permitted Use

*Greenhouses must be 200 ft. from any lot line (LUC 3.5.2.2)
 **Setbacks for animal shelters: 50/100 ft from property lines (LUC 3.5.2.1a, 1&2)
 ***No Performance Criteria stipulated for General Farming

+ Other Urban Land Use Groups where Family Dwellings are a Permitted Use

Groups	Classes	Agricultural Secondary Uses
Office	O-1, O-2, O-3	No agricultural land uses identified
Commercial	NC, C-1, C-2, C-3	C-2 & C-3: general farming secondary to Residential
Mixed use	OCR-1, OCR-2, PDC, MU	MU: animal production permitted, but limited to stables.

Policy recommendations are based on:

- The benefits of urban agriculture, particularly as a strategy to foster self-reliance, public health, and community sustainability
- Existing ordinances
- Current practice and experience regarding compatibility and complaints
- Feedback from current residents who keep chickens
- Experience in other similar communities
- Anticipated concerns from the public
- "If it ain't broke, don't fix it" – e.g. no proposed rules that are more restrictive than what we have now *if there has been no problem.*

Recommendations: Define urban agriculture

Agricultural Land Use Group			
Rural/Peri Urban (primarily commercial use)		Urban (primarily personal use, backyard & community gardens)	
Animal Production	Crop Production	Small Animal Production	Crop Production

+ Focus on urban crop production

+ Gardening for personal food production is technically not permitted in most urban residential zones!

- Defined as "General Farming" – crop and animal production for personal use.
- Only urban residential zone where General Farming is permitted is RX-1.
- "Crop Production" for commercial use is a permitted use in residential zones. Setback requirements preclude greenhouses on residential properties.
- Sale of homegrown crops from where they are grown is only permitted in rural areas at "farm stands."

You can sell your junk in your front yard, but not a carrot that you grew.



continued...

+ Gardening for personal food production is technically not permitted in most urban residential zones!

- Community Garden is not mentioned as a recognized land use
- Farmers' Market: mentioned in the Retail Trade Group and combined with Swap Meets and Auctions (LUC 6.3.10.10). They are not permitted in residential zones

20 community gardens were developed with CPPW funding



+ Gardening Practice – identified through CPPW

- 2 Urban farms
- 20 School Gardens
- 58 Community Gardens
- 913 Household Gardening Coop members

Unknown number of additional school, community and household gardens

+ Community Gardening Recommendations:

- ✓ Define community gardens as: "a public or not for profit area for cultivation of fruits, flowers, vegetables, or ornamental plants by one or more than one person or family, and may include composting areas and the incidental sales of products cultivated on-site." (Clarion #5)
- ✓ Allow community gardens as a primary or accessory use in every zone except IR and P. (Clarion #5)
- ✓ Allow community gardens to qualify as required open space set-asides

+ Backyard gardening Recommendations:

- ✓ Allow the incidental sale of food grown on-site as an accessory use in residential zones where family dwelling where general home occupation is permitted. (Clarion #4)
- ✓ Allow accessory buildings for non-animal use in side and rear setbacks (Clarion #7)
 - Greenhouses
 - Rainwater harvesting,
 - Greywater systems
 - Composting bins

+ Farmers' Market Recommendations:

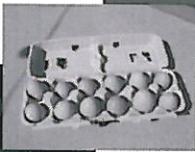
- ✓ Define farmers' markets as:

"Occasional or periodic commercial activities held in an open or covered area where groups of sellers rent space on a short-term basis for the primary purpose of displaying, bartering, or selling food products, with accessory display, bartering and sale of crafts and related items, to the public and at least 20% of the farmer's market spaces does not occupy the same allotted area on an uninterrupted, continuous daily basis for the purpose of display and sale, exchange, or barter or merchandise." (Clarion #6)

+ Farmers' Market Recommendations:

- ✓ Allow farmers' markets in C-2, C-3, I-2 (currently permitted); and in C-1, MU, OCR-1, OCR-2, I-1, PAD, PCD.
- ✓ Farmers' markets may only be operated from 7:30 am-7 pm.
- ✓ No more than 60 vendors
- ✓ Stalls not larger than 20' X 20'.
- ✓ Litter, tents, stalls, merchandise, and other evidence of the market shall be removed at the end of each market day.

+ Focus on Animals



+ What animals are we talking about?

Fowl
Chickens
Ducks
Turkeys

Small farm animals
Miniature Goats (pairs)
Rabbits
Rodents (guinea pigs)

Recommendations: Definition of animals

Animal
Any fowl, reptile, amphibian or mammal, except human beings

Large Animals		Small Animals	
<u>Ratites</u>	<u>Livestock</u>	<u>Farm</u>	<u>Fowl</u>
Large, flightless birds, including emus and ostriches	Cattle, horses, sheep, oxen, donkeys, mules, llamas, and other similar animals	Miniature goats, rabbits, rodents, and other similar animals	A bird that is used to produce meat or eggs, including, but not limited to chickens, ducks, turkeys

+ Current Animal Policy (general)

Municipal Code Chapter 4: Animals and Fowl	Land Use Code 3.5.2 Agricultural Use Group
<ul style="list-style-type: none"> ■ Nuisance ■ No running at large ■ Sanitation ■ Animal welfare ■ Dangerous, diseased animals ■ Up to 3 miniature pigs permitted per household ■ Up to 24 fowl 	<ul style="list-style-type: none"> ■ Setbacks for all animal structures: 50 feet from all property lines ■ Setbacks for stables, barns, and animal sheds or shelters 100 feet from any property line. ■ Enclosure for horses, cattle, sheep, goats, or similar animals: 400 sq ft per animal

+ Tucson policies are contradictory regarding raising animals for food production in most urban residential zones.

- Defined as "General Farming" – crop and animal production for personal use.
- Only urban residential zone where General Farming is permitted is RX-1.
- Development Standards 3.2.5.1.D: "Animals may be kept for personal use in all zones subject to Tucson Code, Chapter 4, and any applicable health regulations."
- Setback requirements for animal shelters preclude most urban residential properties.

3 Miniature pigs are permitted – they are not a food source.



120-150 lbs

+ City Chickens?

Benefits:

- Source of meat and eggs
- Excellent source of fertilizer
- Eat table scraps, mosquito larvae, ticks and other insects



+ Current Fowl Policy

Municipal Code Chapter 4, Article 4 Fowl	Land Use Code 3.5.2 Agricultural Use Group
---	---

- Up to 24 birds
- No roosters
- Nuisance
- Sanitation
- 50 feet from any dwelling
- 50 ft (structures for animals) or 100 ft (animal sheds and shelters) setback from all property lines

+ Noise - Fears vs. reality

Noise at the source:	TCC 16-31: Excessive noise beyond the property line:
Human conversation 60-70 decibels	70 decibels 7am-10pm 62 decibels 10pm-7am
Laying hens 60-70 decibels	Owning or harboring any animal or bird that frequently or continuously howls, barks meows, squawks or makes other sounds is prohibited.
Dog barking 75 decibels	
Baby crying 110 decibels	

A bleating goat is not as loud as a barking dog -- and they don't bleat at people walking by.

+Current Fowl Practice

What chickens need	Local practices
---------------------------	------------------------

- Hen house: 3-4 sq ft of floor space and 1 sq ft roosting space off the ground
- 10 sq ft per bird
- Fencing – 5' high
- People read the Ordinance and believe they are permitted to have up to 24 chickens.
- Backyard chickens are common in Tucson neighborhoods
- Coops commonly utilize property line fences or walls to enclose chickens – 50 ft. setback is frequently ignored

+ Current Fowl Practice – few complaints

Pima County Animal Control fields complaints

January 2008-August 2011: **8 complaints**

- 2 complaints of chickens running loose; 3 impounded
- 2 complaints of dead chickens; 2 animals picked up
- 1 complaint of a rooster; removed and re-located in County limits
- 1 complaint of Cock fighting, 29 roosters and 23 hens were impounded
- 1 complaint of neglect/abandonment; 1 rooster and 5 hens impounded
- 1 search warrant (not animal related) was served and animals were found. 20 baby chicks and 25 chickens were left, 1 rooster was removed and re-located in County limits.

Miniature Goats

Benefits

- Milk
- Meat
- Mohair
- Mow the lawn!
- Trainable as pets

Nigerian Dwarfs
Pygmy Goats
Hybrids



Fears vs. reality

Size

Miniature goat: 50-100 lbs

Dogs:

American Bulldog: 70-100 lbs
 Akita: 70-100 lbs
 German Shepherd: 64-90 lbs
 English Setter: 75-80 lbs




+ Current Goat Policy

Municipal Code	Land Use Code
<ul style="list-style-type: none"> Nuisance No running at large Sanitation Animal welfare Dangerous, diseased animals No grazing or pasturing unless on land owned or leased by the owner of the animal Exempt from sales tax if used for breeding or production 	<ul style="list-style-type: none"> Fenced in area of no less than 400 square feet per animal. Rear setbacks: 10 feet where it abuts an IR, RH, SR, SH, RX-1, or RX-2 zone; 40 feet from the rear where it abuts any other zone Side setbacks: 40 feet, 10 feet with permission of adjacent property owner. Neighboring residence setback: 50 feet.

+ Current Miniature Goat Practices

What goats need	Local Practices
<ul style="list-style-type: none"> Social animals – need to be in pairs Approximately 20 sq ft of shelter per goat Approximately 130 sq ft of outdoor space Things to climb on so they don't get bored 	<ul style="list-style-type: none"> Both miniature and standard goats are being kept in city limits. Not as extensive as chickens, but a growing interest

+ Current Fowl Practice – few complaints
 Pima County Animal Control fields complaints

Since 2006: **4 complaints**

- 3 roaming goats
- 1 slaughtering without a license

+ Animal Recommendations

- ✓ Small animals only: farm and fowl
- ✓ No animals in front or side yards
- ✓ Allow animal shelters (coops, runs, fenced areas) to utilize rear and side yard fencing as boundaries

+ Example: R-1

"The coop is on the W fence line near the property with all the junk. The coop is actually quite small (kinda reminds me of an outhouse). I did check with my neighbors first before setting this up..."

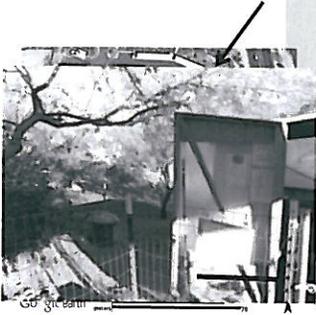
Residential, Single Family, low density, single-family, residential development
 Schools, parks and other public services



+ Example: R-2

Medium density residential: multifamily and single family residences.

Lot size: 5,000 sq ft



+ Example: R-2

Medium density residential: multifamily and single family residences.

Lot size: 5,000 sq ft

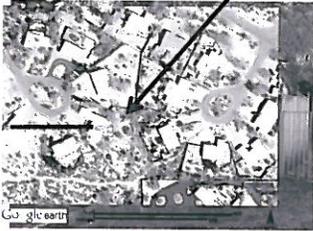


+ Example: RX-1

The coop is against the north side of the property line.

Low density residential: Suburban, low density, single-family, residential development and other compatible neighborhood uses.

Lot size = 36,000 sq ft



+ Example: HO-3

Historic Office: Mid-rise office development and other land uses which provide reasonable compatibility with adjoining residential uses.

Lot size = ???



+ Example: C-2

General and Intensive Commercial: Retail commercial with wholesale, nightclubs, bars, amusement enterprises permitted.



+ How many?

- Specific number for each type?
- Animal Units: Measuring overall animal impact
 - Setting grazing fees: BLM, National Forest Service
 - Estimating grazing carrying capacity: Pima County Ag Extension
 - Estimating manure production: Natural Resources Conservation Service
 - 1 AU=26 lbs forage daily
 - 1000 lb cow = 1 AU
 - 700 lb steer = .8 AU
 - 120 lb sheep = .2 AU

+ Urban Animal Units

Animal Units by Animal

- Chickens = .1
- Rabbits = .1
- Rodents = .1
- Ducks = .2
- Turkeys/geese = .4
- Miniature Goat = .5

+ Translating Units into Animals – sample scenarios

1 unit =	1.5 units =	2 units =	2.5 units =
10 chickens	15 chickens	20 chickens	25 chickens
2 goats	2 goats	4 goats	4 goats
2 chickens	5 chickens	5 chickens	5 chickens
1 turkey	7 chickens	1 turkey	10 chickens
2 ducks	2 ducks, 1 turkey	2 goats	2 goats
5 rabbits	3 chickens	3 chickens	2 ducks
5 chickens	3 chickens	2 goats	1 rabbit
	6 rabbits	1 turkeys	4 turkeys
	3 ducks	3 rabbits	2 goats
			3 chickens

Zone	Lot Size (sq ft)	Animal Units
RX-1	36,000	3
RX-2	18,000	2.5
R-1	10,000 2 houses/ 7,000 1 house	2
R-2	5,000	1.5
MH-1	7,000	2
MH-2	5,000	1.5
R-3	5,000	1.5
O-1	7,000	2
O-2	5,000	
O-3	5,000	
NC	7,000	2
C-1	No minimum	
C-2	No minimum	
C-3	No minimum	
OCR-1	No minimum	

**Summary of Recommendations
General**

LUC recognition of urban agriculture in the Agricultural Land Use Group

Gardening/Crops

Define **community gardens** and allow them as a primary or accessory use in every zone except IR and P. Allow community gardens to qualify as required open space set-asides

Allow the incidental sale of food grown on-site as an accessory use in residential zones where family dwelling where general home occupation is permitted.

Allow accessory structures (greenhouses, rainwater harvesting, etc.) for non-animal use in **side and rear setbacks**

Gardening/Crops (cont)

Define **farmers' markets** and permit them in C-2, C-3, I-2 (currently permitted); and in C-1, MU, OCR-1, OCR-2, I-1, PAD, PCD. Define restrictions on the time, number of vendors, size of stalls, and cleanup.

Animals

Separate large (livestock) and small (fowl and farm) animals in the LUC. Permit small animals in urban residential zones.

No animals in front or side yards

Allow animal shelters (coops, runs, fenced areas) to utilize rear and side yard fencing as boundaries

Establish overall number of animals permitted by zone.

Now That I Grew It What Can I Do With It?

Fact Sheet for Home and Community Gardeners in Tucson

After you have eaten as much of your garden harvest as you can and offered your bounty to your family, friends, and neighbors, you may find that you have a surplus. This Fact Sheet provides information about the rules around selling locally grown produce in the City of Tucson. **If you live in a community that has Conditions, Covenants and Restrictions (CC&Rs), you will need to adhere to those rules as well.** Contact your Homeowners' Association for more information.

In the following explanation, words in **BOLD CAPS** are defined in the Glossary at the end of this document.

Background: Rules for selling homegrown produce in Tucson

The rules that regulate the sale of homegrown produce in Tucson come from several sources, including:

- **Arizona Revised Statutes (ARS)** regulates agriculture. It is available online at:
<http://www.azleg.gov/ArizonaRevisedStatutes.asp>
- **Pima County Food Code (PCFC)** protects public health and sanitation. It is available online at:
<http://www.pimahealth.org/healthfood/documents/PCC808FoodCodeComplete.pdf>

The PCFC establishes certain rules that are specific for Pima County and also incorporates the Arizona Food Code (**AFC**) in its entirety. For additional explanation of the Food Code, please see the companion Fact Sheet, *Facts on the Arizona Food Code for Gardeners*.

- **Tucson Land Use Code (TLUC):** establishes zones within city limits where certain **LAND USES** are permitted in order to promote health, safety, and welfare of community residents. Land uses are categorized by **LAND USE GROUPS**, which are further categorized by **LAND USE CLASSES**. The agricultural land use group includes the following classes:
 1. **ANIMAL PRODUCTION**
 2. **CROP PRODUCTION**
 3. **GENERAL FARMING**

For each zone, the TLUC identifies which land use groups and classes are **PERMITTED USES, SPECIAL EXCEPTIONS, SECONDARY USES, and ACCESSORY USES**. In addition, a **DEVELOPMENT DESIGNATOR** specifies criteria for structures that are built such as height, density, and perimeter yards.

Selling produce is a **RETAIL TRADE** land use group. If you sell your produce from your home, it falls into the **FOOD AND BEVERAGE SALES** land use class; if you sell your produce at a farmers' market, it falls into the **SWAP MEETS AND AUCTIONS** land use class.

The TLUC can be found at: <http://cms3.tucsonaz.gov/sites/default/files/planning/Complete%20LUC.pdf>.

- **The Tucson City Code (TCC)** contains local ordinances (laws):
<http://www.amlegal.com/library/az/tucson.shtml>.

The TLUC is currently being revised with an eye to addressing issues of sustainability, including food production. Some of the provisions under consideration include expanding the types of animals allowed to be raised in the City and more detailed compatibility standards to ensure conflicts are avoided. **If you are interested in following these issues and advocating for zoning rules that promote urban food production, contact:**

Oscar Parra
Communities Putting Prevention to Work
UA Zuckerman College of Public Health
520-626-3615
oscardp@email.arizona.edu

Who can I sell to?

State law (A.R.S. § 3-561, 3-562) permits any grower to sell produce directly to the consumer as long as it has not been cut or **PREPARED** in any way. Once you cut or prepare fresh fruit or vegetables, they become **POTENTIALLY HAZARDOUS** and your preparation operation must be licensed as a commercial kitchen. The Pima County Health Department licenses and inspects commercial kitchens.

You may also sell your whole, uncut produce to **FOOD ESTABLISHMENTS** that will use it to prepare foods in their licensed commercial kitchens.

Where can I sell the produce I grow?

Selling on your property: The TLUC only addresses selling produce from **FARM STANDS**. The sale of produce at farm stands in a residential zone is only permitted as a **SECONDARY USE** in zones where **CROP PRODUCTION** is a **PERMITTED USE**. Only the sale of farm products grown on the premises is permitted. To determine the zone of your property, call Planning and Development Services: 837-9666. Table 1 shows the zones where selling produce is permitted and the requirements for farm stands in those zones:

Table 1: Selling homegrown produce at farm stands in residential zones

Zones	Farm stand requirements
SR: Suburban Ranch	The stand can be a maximum area of 200 square feet; only one stand is allowed; the stand cannot be located closer than 20 feet to any property line; and the minimum parking area is 800 square feet (TLUC, 2.2.4.4, 3.5.9.1).
SH: Suburban Homestead	The stand can be a maximum area of 200 square feet; only one stand is allowed; the stand cannot be located closer than 20 feet to any property line; and the minimum parking area is 800 square feet (TLUC, 2.2.6.4, 3.5.9.1).
RH: Rural Homestead	The stand can be a maximum area of 750 square feet; the stand cannot be located closer than 20 feet to any property line; the minimum setback from any street intersection is 150 feet; the parking area must be set back a minimum of 45 feet from the property line; the minimum parking area is 800 square feet; the maximum width of the entry to the parking area is 30 feet (TLUC, 2.2.2.4, 3.5.9.1).
IR: Institutional Reserve	The stand can be a maximum area of 750 square feet; the stand cannot be located closer than 20 feet to any property line; the minimum setback from any street intersection is 150 feet; the parking area must be set back a minimum of 45 feet from the property line; the minimum parking area is 800 square feet; the maximum width of the entry to the parking area is 30 feet (TLUC, 2.2.2.4, 3.5.9.1).

Farmers' Markets: You can sell whole produce at a farmers' market. There are many farmers' markets operating in Pima County. The Arizona Department of Health Services maintains a "farmers' market locator" tool on its website: <http://app1.azbnp.gov/farmersmarket/default.aspx>. There are two organizations in Pima County that operate food banks in several locations. To get information about selling produce at one of these markets, contact:

- The Community Food Bank: <http://communityfoodbank.com/programs-services/community-food-security-center/farmer-markets/> or call the Community Food Consignment Coordinator at 520-622-0525.
- Tucson Farmers' Markets: <http://farmersmarkettucson.com/vendors>

Swap meets: Growers may sell their whole produce at swap meets in Pima County. Two large swap meets in the greater Tucson area include:

- Tanque Verde Swap Meet: <http://www.tanqueverdeswapmeet.com/>
- Tohono O’odham Swap Meet: 5721 South Westover Ave., Tucson, AZ 85746-3006
520-578-9183

What other permissions do I need?

As long as you are selling the produce that you grew, and you are selling it at a farmers’ market, swap meet, or farm stand that conforms to the Tucson Land Use Code, there are no other licenses, requirements, or permissions you need.

Important Definitions

ACCESSORY USE: Uses that are incidental to, or necessary for, the operation of the principal **PERMITTED** or **SECONDARY** Land Uses (TLUC 2.1.7).

AFC: Arizona Food Code

ANIMAL PRODUCTION: A **LAND USE CLASS** in the **AGRICULTURAL USE GROUP** that entails the keeping, grazing, feeding, and breeding of animals by the property owner or occupant for commercial gain. Typical uses include horse ranches and dairy, poultry, and rabbit farms (TLUC 6.3.3.2).

CROP PRODUCTION: A **LAND USE CLASS** in the **AGRICULTURAL USE GROUP** that entails growing and harvesting of agricultural products to provide food, fiber, and/or horticultural vegetation for ornamental uses, including field crops, fruit and nut orchards, nurseries, and greenhouse operations. (TLUC 6.3.3.3).

DEVELOPMENT DESIGNATOR: Establishes the development criteria, such as height, density, and perimeter yards, required for each land use listed as a Permitted or Special Exception (TLUC 2.1.8).

FOOD ESTABLISHMENT: an operation that stores, prepares, packages, serves, transports, vends, or otherwise provides food for human consumption, including restaurants, catering operations, markets, vending locations, food banks, mobile, stationary, temporary or permanent facilities where consumption is on/off premises, regardless of whether there is a charge for food (AFC 1-2-B-(31)).

GENERAL FARMING: A **LAND USE CLASS** in the **AGRICULTURAL USE GROUP** that entails any combination of **ANIMAL PRODUCTION** and **CROP PRODUCTION** limited to personal use (TLUC 6.3.3.4).

LAND USE CLASS: A sub-category of **LAND USE GROUPS** that define specific activities (TLUC, 2.1.3).

LAND USE GROUP: Broad categories that identify the activity allowed in various zones (TLUC, 2.1.3; 6.3.2.1).

LAND USES: Any activity conducted on a property within the City (TLUC 6.3.1). Activities are categorized into **LAND USE GROUPS**, which are further categorized by **LAND USE CLASSES**. The TLUC defines groups and classes that are **PERMITTED USES**, **SPECIAL EXCEPTION USES**, **SECONDARY USES**, and **ACCESSORY USES** in each zone (TLUC 2.1.3).

PERMITTED USE: **LAND USE CLASSES** that are allowed within a zone (TLUC 2.1.4).

POTENTIALLY HAZARDOUS FOOD: a food that is natural or synthetic and that requires temperature control because it is in a form capable of supporting the rapid and progressive growth of infectious or toxic microorganisms. It includes food of animal origin (raw or heat-treated) and food plant origin (that is heat-treated or consists of raw seed sprouts; cut melons; and garlic-in-oil mixtures) (AFC 1-2-B-(61)).

PREPARED: to process commercially by manufacturing, packaging, labeling, cooking, or assembling (AFC 1-2-B-(63a)).

PRINCIPAL LAND USE: A land use that is allowed in a zone as a Permitted Land Use or as a Special Exception Land Use. The principal use is generally the primary or predominant activity conducted on a parcel; however, two (2) or more principal uses can be located on the same parcel in some zones (TLUC 3.2.2).

RETAIL TRADE: The **LAND USE GROUP** that includes **LAND USE CLASSES** that involve the selling, leasing, or renting of goods and merchandise to the general public.(TLUC, 6.3.10).

SECONDARY USES: Land uses that are permitted within that zone in conjunction with, but subordinate to, a principal Permitted Land Use (TLUC 2.1.6).

SPECIAL EXCEPTIONS: Uses that may be permitted within that zone only if approved through a Special Exception Land Use procedure and if the use complies with any additional conditions listed for the Land Use Class (TLUC 2.1.5).

TLUC: The Tucson Land Use Code establishes zones and land uses within city limits.



Communities Putting Prevention to Work

Brought to you by the Department of Health and Human Services
Web address



CPPW Policy Team
Zuckerman College of
Public Health
Contact Merrill Eisenberg
merrill@u.arizona.edu
August, 2011

The Birds, the Bees and the Beasts

Fact Sheet on Backyard Farm Animal Rules in Tucson

This fact sheet provides information about the rules that govern raising farm animals in Tucson. If you live in a community that has CC&Rs, you need to be sure to follow those rules as well. Words in **BOLD CAPS** are defined or explained at the end of the document. This fact sheet does not address the rules for slaughter, processing, and sale of meat, dairy, or eggs.

Rules for raising animals for consumption are found in the Tucson Land Use Code and the Tucson City Code. These rules are in place to protect public health, the animals and the environment. *If you live in a community that has Conditions, Covenants and Restrictions (CC&Rs), you will need to adhere to those rules as well.*

The Tucson Land Use Code (TLUC) establishes zones within city limits where certain **LAND USES** are permitted in order to promote health, safety and welfare of community residents. Land uses are categorized by **LAND USE GROUPS**, which are further categorized by **LAND USE CLASS**. Raising farm animals falls under the **AGRICULTURAL USE** group, and is considered to be in the **ANIMAL PRODUCTION** land use class if it is done commercially and in the **GENERAL FARMING** land use class if it is limited to personal use.

For each zone, the TLUC identifies which land uses are **PERMITTED USES**, **SPECIAL EXCEPTIONS**, **SECONDARY USES** and **ACCESSORY USES**. In addition, a **DEVELOPMENT DESIGNATOR** specifies criteria for structures that are built such as height, density, and perimeter yards.

The TLUC can be found at: <http://cms3.tucsonaz.gov/sites/default/files/planning/Complete%20LUC.pdf>

The Tucson City Code (TCC) contains local ordinances (laws). The housing and treatment of animals is addressed in Chapter 4, Animals and **FOWL**, and in Chapter 11, Crimes and Offenses. The TCC can be found at: <http://www.amlegal.com/library/az/tucson.shtml>

The TLUC is currently being revised with an eye to addressing issues of sustainability, including food production. **If you are interested in following these issues and advocating for zoning rules that promote urban food production, contact:**

Oscar Parra
Communities Putting Prevention to Work
UA Zuckerman College of Public Health
520-626-3615
oscadrp@email.arizona.edu

Can I raise animals on my property?

Table 1 shows the residential zones where the raising of various types of animals is permitted, subject to **DEVELOPMENTAL DESIGNATOR** rules and additional restrictions (see **Table 2** and the discussion later in this document). *To determine the zone of your property, call Planning and Development Services 837-9666.*

Table 1: Zones where both residences and farm animals are permitted in Tucson, Arizona

Zones	Birds (FOWL)	Bees	Beasts (LIVESTOCK)	
			Hogs*	Cattle, Horses, Goats, Sheep
R-1: Urban Residential		X		
R-2: Urban Residential		X		
R-3: Urban Residential		X		
RX-1: Urban Residential	X	X		X
RX-2: Urban Residential		X		
MH-1: Mobile Home		X		
MH-2: Mobile Home		X		
SR: Suburban Ranch	X	X		X
SH: Suburban Homestead	X	X	X	X
RH: Rural Homestead	X	X	X	X
MU: Multiple Use	X	X		X
IR: Institutional Reserve	X	X	X	X
C2: Commercial Zone	X	X		X
C3: Commercial Zone	X	X		X

* Keeping up to 3 **MINIATURE PIGS** is permitted in any zone.

PLANNED AREA DEVELOPMENT ZONES: Some parts of the City are zoned as Planned Area Developments (PAD zones), identified by name. If you live in a PAD zone, you should contact *Tucson Planning and Development Services Department* (791-5550) for information about raising animals in your zone. PADs may have different requirements that supersede other requirements in the TCC and TLUC.

What animals are prohibited in any zone?

- Any animal afflicted with any contagious or infectious disease unless such animal is under the control of a certified veterinarian (TCC 4.40)
- Animals suspected of rabies (TCC 4-42)
- **VICIOUS** or **DESTRUCTIVE** animals (TCC 4-7)
- Male fowl or guinea fowl (TCC 4-59).

What are the rules about raising various types of animals?

1. All animals:

Cruelty and Neglect: The Tucson City Code protects ALL animals from cruelty and neglect (TCC 4-3) by requiring the following:

- Providing daily food that is free from contamination and is of sufficient quantity and nutritive value to maintain the animal in good health.
- Potable water is accessible to the animal at all times, either free-flowing or in a clean receptacle.
- Except for **LIVESTOCK**, all animals have convenient access to natural or artificial shelter throughout the year. Artificial shelters shall be structurally sound and maintained in good repair to protect the animal from injury and from the elements, and of sufficient size to permit the animal to enter, stand, turn around and lie down in a natural manner. Any shelter

which does not protect the animal from temperature extremes or precipitation, or which does not provide adequate ventilation or drainage, shall not comply with this section. Any shelter, all bedding and any spaces accessible to the animal shall be maintained in a manner which minimizes the risk of the animal contracting disease, being injured or becoming infested with parasites.

- The animal receives care and medical treatment for debilitating injuries, parasites and diseases, sufficient to maintain the animal in good health and minimize suffering.
- The animal is given adequate exercise space within an enclosure that shall be constructed of material, and in a manner, to minimize the risk of injury to the animal, and shall encompass sufficient usable space to keep the animal in good condition. Tieouts are prohibited.
- The animal has access to adequate ventilation and is protected from temperature extremes at all times. No peace officer or county animal control officer shall be liable for damages to property caused by the use of reasonable force to remove an animal from such a vehicle or other enclosed space under such circumstances.

Animal Fighting: Allowing any animal or fowl to engage in a fight with any other animal or fowl for a wager, sport, or any other purpose is not permitted (TCC 4.4).

Manure: Rules about the disposal and accumulation of manure, animal bedding, and body waste include (TCC 4-28):

- Manure, animal beddings or body wastes from domestic animals such as horses, cows, donkeys or goats must be placed into a receptacle of sufficient size within 24 hours.
- The receptacle must be constructed so that its contents are not accessible to flies; it must be placed within the premises owned, occupied or controlled by such person in a location as remote as possible from any surrounding dwelling or street. The owner must empty and cleanse the receptacle as often as necessary, but not less than twice each week.
- These rules shall not prevent the owner or occupant of a residential premises from placing animal manure produced by herbivorous animals into a residential compost pile or residential compost windrow, provided it is placed into the compost pile or windrow within 24 hours from the time it is deposited.

Noise: Owning, possessing, harboring or permitting any animal or bird which frequently or continuously howls, barks, meows, squawks or makes other sounds is prohibited (TCC 16-31(b)(3)).

2. **Birds (FOWL):**

Number permitted: In zones where they are permitted, no more than 24 fowl can be kept (TCC 4.56).

Structures and facilities: Coops, houses, sheds or other structures must be at least 50 ft from the dwelling house of any other person within the city (TCC 4.57). All structures must be set back at least 50 ft from all property lines (TLUC 3.2.5.2G).

Keeping the coop clean and sanitary: Coops, houses, sheds, structures, yards, corrals or enclosures in which fowl are housed must be kept in a clean and sanitary condition (TCC 4.58).

Running at large: It is unlawful for any person to permit any chickens, ducks, geese or turkeys to run at large within the city (TCC 4.55).

Selling baby chickens and ducklings is prohibited. It is unlawful for any person to sell or to give away baby chickens or ducklings under six weeks of age in less than half-dozen lots as premiums, novelties, prizes, pets or toys, for the promotion of any business, sale, activity or other

promotional use; provided that this section shall not be considered to prohibit the sale or display of baby chickens or ducklings or rabbits in proper facilities that comply with the provisions of any sanitary code, or other rules and regulations of the board of health, by breeders and those engaged in the business of selling for commercial breeding and raising purposes (TCC 4-8).

3. **Bees:**

Number permitted: One hive, stand, box or other structure, natural or otherwise, containing bees is permitted for each 2,500 square ft of **LOT** area. Exception: Zones SR and IR (TCC 11.3(1)) where more than 1 hive is permitted.

Structures and facilities: If bees are kept within 30 ft of any exterior lot boundary line, a barrier must be erected that will prevent bees from flying through it. The barrier must be at least 5 ft high and consist of plant, hedge or any constructed material. The barrier must extend at least 30 ft beyond the **APIARY** in both directions. (TCC 11.3(1)).

Provision of water: Fresh, clean watering facilities for bees shall be provided on the premises. (TCC 11.3(1)).

Registration: Each beekeeper shall register the beekeeping operation with the Arizona Commission of Agriculture and Horticulture (TCC 11.3(2)).

Notifying neighboring commercial farmers: The State of Arizona requires you to notify and get permission from any landowner or lessee who is engaged in commercial agriculture if your bees will forage on their property. The notice shall include the beekeeper's address and telephone number, the location of the hives within a quarter section and the exact dates that the bees will be in the area. After receiving the notice the person who engages in commercial agriculture must inform the beekeeper, before application, when a bee sensitive pesticide will be applied to the area in which the bees are foraging. (ARS 3-367.02).

4. **Beasts: Hogs and other Livestock:**

Structures and facilities: All structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (TLUC 3.2.5.2G) Structures for housing or keeping horses, mules, cows, or goats must be at least 20 ft from any dwelling (TCC 4-27).

Running at large is prohibited. It is unlawful for the owner of any horse, colt, mule, donkey, burro, ox, bull, cow, calf, hog, pig, sheep, goat or other large or dangerous animals to permit them to run at large within the city (TCC 4-21).

Grazing or pasturing livestock and other large animals in the City. It is unlawful for any person owning or having control of any animal to graze or pasture or permit the grazing or pasturing upon any land within the city, except upon land owned or leased by the owner of such animals, and unless the animals are securely fastened so that they do not run at large or trespass; moreover, the animal must be adequately fed and watered and reasonably protected from the weather (TCC 4-22).

Even when the zoning code allows animals to be raised in a particular zone, there are other zoning rules that govern how they are kept and cared for. There are rules for both **GENERAL FARMING** (raising animals for the owner's consumption) and **ANIMAL PRODUCTION** (raising animals for commercial purposes). These rules mostly address required setbacks and other rules for structures, fencing, and number of animals permitted. **Table 2** summarizes the rules found in the **TLUC** for raising animals in various zones.

Table 2: TLUC Zoning Rules for Raising Hogs and Livestock by Zone and Land Use Class

Zone	Use Class: GENERAL FARMING (for personal use)	Use Class: ANIMAL PRODUCTION (for sale)
RX-1	<p align="center">PERMITTED USE</p> <p>Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1).</p> <p>No more than 2 horses or 2 head of cattle per 36,000 sq ft of lot area (3.5.2.1.B.1).</p> <p>Stock tight fences and cattle guards along boundaries of areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range (3.5.2.1.B.2).</p> <p>No hogs are allowed (3.5.2.1.C.1).</p>	<p align="center">PERMITTED USE</p> <p>Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1).</p> <p>No more than 2 horses or 2 head of cattle per 36,000 sq ft of lot area (3.5.2.1.B.1).</p> <p>Stock-tight fences and cattle guards along boundaries of areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range. (3.5.2.1.B.2).</p> <p>No hogs are allowed (3.5.2.1.C.1).</p>
IR	<p align="center">PERMITTED USE</p> <p>Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1).</p> <p>Stock-tight fences and cattle guards along boundaries of areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range (3.5.2.1.B.2).</p> <p>No more than 1 hog weighing more than 50 lbs per 36,000 square ft of lot area (3.5.2.1.C.2).</p> <p>Hog raising projects which exceed this limit are permitted if sponsored by 4-H, FFA or a similar organization, and confirmed by letter. (3.5.2.1.C.3)</p>	<p align="center">PERMITTED USE</p> <p>Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1).</p> <p>Stock- tight fences and cattle guards along boundaries or areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range (3.5.2.1.B.2).</p> <p>No more than 1 hog weighing more than 50 lbs per 36,000 square ft of lot area (3.5.2.1.C.2).</p> <p>Hog raising projects which exceed this limit are permitted if sponsored by 4-H, FFA or a similar organization, and confirmed by letter. (3.5.2.1.C.3).</p> <p align="center">SPECIAL EXCEPTION USES</p> <p>Hog ranches: hogs must be penned at least 500 ft from any property line (3.5.3.2.C.4).</p> <p align="center">SECONDARY USES: Retail Trade Food and Beverage Sales</p> <p>Only products produced on the premises are allowed to be sold (3.5.9.1.C).</p> <p>Farm stand may not be more than 3,000 square ft (3.5.9.1.B.1).</p> <p>The building cannot be located closer than 20 ft from the property line (3.5.9.1.D).</p> <p>Minimum setback from the street is 150 ft (3.5.9.1.E).</p> <p>Minimum parking area setback is 45 ft from the property line (3.5.9.1.F).</p> <p>Minimum parking area is 800 sq ft (3.5.9.1.G).</p> <p>Maximum width of entry to the parking area is 30 ft (3.5.9.1.H).</p> <p>Vehicular use area is surfaced if the stand is open more than 6 months per calendar year. If open for a short time, the area must be maintained to minimize dust (3.5.9.1.I).</p>

Table 2: TLUC Zoning Rules for Raising Hogs and Livestock by Zone and Land Use Class (cont.)

Zone	Use Class: <u>GENERAL FARMING (for personal use)</u>	Use Class: <u>ANIMAL PRODUCTION (for sale)</u>
RH	<p align="center">PERMITTED USE</p> <p>Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1).</p> <p>Stock-tight fences and cattle guards along boundaries of areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range (3.5.2.1.B.2).</p> <p>No more than 1 hog weighing more than 50 lbs per 36,000 square ft of lot area (3.5.2.1.C.2).</p> <p>Hog raising projects which exceed this limit are permitted if sponsored by 4-H, FFA or a similar organization, and confirmed by letter. (3.5.2.1.C.3).</p> <p>Greenhouses must be at least 200 ft from every lot line (3.5.2.2).</p>	<p align="center">PERMITTED USE</p> <p>Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 feet from all property lines (3.5.2.1.A.1).</p> <p>Stock-tight fences and cattle guards along boundaries of areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range. (3.5.2.1.B.2).</p> <p>No more than 1 hog weighing more than 50 lbs per 36,000 square ft of lot area (3.5.2.1.C.2).</p> <p align="center">SPECIAL EXCEPTION</p> <p>Hog ranches: hogs must be penned at least 500 ft from any property line (3.5.3.2.C.4).</p> <p align="center">SECONDARY USE: Retail Trade Food and Beverage Sales</p> <p>Only products produced on the premises are allowed to be sold (3.5.9.1.C).</p> <p>Farm stand may not be more than 3,000 square ft (3.5.9.1.B.1).</p> <p>The building cannot be located closer than 20 ft from the property line (3.5.9.1.D).</p> <p>Minimum setback from the street is 150 ft (3.5.9.1.E).</p> <p>Minimum parking area setback is 45 ft from the property line (3.5.9.1.F).</p> <p>Minimum parking area is 800 sq ft. (3.5.9.1.G).</p> <p>Maximum width of entry to the parking area is 30 ft (3.5.9.1.H).</p> <p>Vehicular use area is surface if the stand is open more than 6 months per calendar year. If open for a short time, the area must be maintained to minimize dust (3.5.9.2.1).</p>
SR & SH	<p align="center">PERMITTED USE</p> <p>Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1).</p> <p>Stock-tight fences and cattle guards along boundaries of areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range (3.5.2.1.B.2).</p> <p>No hogs are allowed (3.5.2.1.C.1).</p>	<p align="center">PERMITTED USE</p> <p>Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1).</p> <p>Stock-tight fences and cattle guards along boundaries of areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range (3.5.2.1.B.2).</p> <p>No hogs are allowed (3.5.2.1.C.1).</p>

Table 2: TLUC Zoning Rules for Raising Hogs and Livestock by Zone and Land Use Class (cont.)

Zone	Use Class: GENERAL FARMING (for personal use)	Use Class: ANIMAL PRODUCTION (for sale)
MU	PERMITTED USE None	PERMITTED USE Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1). No more than 2 horses or 2 head of cattle per 36,000 sq ft of lot area (3.5.2.1.B.1). Stock-tight fences and cattle guards along boundaries of areas where livestock are kept or grazed, unless the adjacent property is zoned IR or open range (3.5.2.1.B.2). No hogs are allowed (3.5.2.1.C.1).
C-2 & C-3	SECONDARY USE to Family Dwelling Structures for animals must be set back at least 50 ft from all property lines, except corrals which must be set back 10 ft from all property lines (3.5.2.1.A.1). No hogs are allowed (3.5.2.1.C.1).	

The TLUC also includes **DEVELOPMENT DESIGNATORS** that identify specific requirements for structures that are built such as height, density, and the size of perimeter yards. The Development Designator rules are complicated. If you plan to build a structure for the animals you raise, you should consult with *Planning and Developmental Services (791-5550)*.

Definitions

ABUTTING: having a common boundary. Parcels or lots having only a common corner are not considered abutting (TLUC 6.2.1).

ACCESSORY USE: Uses that are incidental to, or necessary for, the operation of the principal **PERMITTED** or **SECONDARY** Land Uses (TLUC 2.1.7).

AGRICULTURAL USE GROUP: land uses that involve the commercial production of crops and animals. The following Land Use Classes comprise the Agricultural Use Group: **ANIMAL PRODUCTION, STOCKYARD OPERATION, CROP PRODUCTION, AND GENERAL FARMING** (TLUC 6.3.3.1).

ANIMAL: any fowl, reptile, amphibian or mammal, except human beings (TCC 04.09).

ANIMAL PRODUCTION: A **LAND USE CLASS** in the **AGRICULTURAL USE GROUP** that entails the keeping, grazing, feeding, and breeding of animals by the property owner or occupant for commercial gain. Typical uses include horse ranches and dairy, poultry, and rabbit farms (TLUC 6.3.3.2).

APIARY: one or more hives, stands, boxes or other structures, natural or otherwise containing bees (TCC 11.03).

CROP PRODUCTION: A **LAND USE CLASS** in the **AGRICULTURAL USE GROUP** that entails growing and harvesting of agricultural products to provide food, fiber, and/or horticultural vegetation for ornamental uses, including field crops, fruit and nut orchards, nurseries, and greenhouse operations (TLUC 6.3.3.3).

CRUELTY: Overdriving, overloading, overworking, torturing, tormenting, cruelly beating, mutilating or unlawfully killing an animal, or causing or procuring an animal to be so overdriven, overloaded, driven when overloaded, overworked, tortured, tormented, cruelly beaten, mutilated or killed, inflicting unnecessary cruelty, cruelly driving or working an animal when it is unfit for labor, or cruelly abandoning it, or carrying it

or causing it to be carried in or upon a vehicle or otherwise, in an unnecessarily cruel or inhumane manner or knowingly and willfully authorizing or permitting it to be subjected to unreasonable or unnecessary torture, suffering or cruelty of any kind (TCC 04-31).

DESTRUCTIVE ANIMAL: any animal that has a propensity to destroy, damage or cause damage to the property of a person other than the animal's owner (TCC 04-7(b)).

DEVELOPMENT DESIGNATOR: Establishes the development criteria, such as height, density, and perimeter yards, required for each land use listed as a Permitted or Special Exception (TLUC 2.1.8).

FOWL: a bird of any kind (TCC 04-9).

GENERAL FARMING: A **LAND USE CLASS** in the **AGRICULTURAL USE GROUP** that entails any combination of **ANIMAL PRODUCTION** and **CROP PRODUCTION** limited to personal use (TLUC 6.3.3.4).

GENERAL PLAN: A policy document that provides a framework for future development in the City. It is used to provide guidance for planning and land use decisions.

LAND USE CLASS: A sub-category of **LAND USE GROUPS** that define specific activities (TLUC 2.1.3).

LAND USE GROUP: Broad categories that identify the activity allowed in various zones (TLUC 2.1.3; 6.3.2.1).

LAND USES: Any activity conducted on a property within the City (TLUC 6.3.1). Activities are categorized into **LAND USE GROUPS**, which are further categorized by **LAND USE CLASSES**. The TLUC defines groups and classes that are **PERMITTED USES**, **SPECIAL EXCEPTION USES**, **SECONDARY USES**, and **ACCESSORY USES** in each zone (TLUC 2.1.3).

LIVESTOCK: Cattle, horses, goats, sheep, hogs, and similar animals (TLUC 5.3.2.1B).

LOT: a tract of land bounded on all sides by property lines, of sufficient size to meet minimum zoning requirements, with legal access to a public street abutting (TLUC, 6-2.1).

LOT LINE: the property lines bounding a lot abutting (TLUC 6.2.1).

MINIATURE PIGS: purebred miniature Vietnamese potbelly pigs (sus bittati), also known as Asian-shar pei, Chinese potbelly pigs, or other similarly purebred miniature pigs (TCC 4-26).

NEGLECT: not providing animals with healthy environments, proper food, water, shelter, medical care, exercise space and ventilation (TCC 04.3(2)).

PERMITTED USE: **LAND USE CLASSES** that are allowed within a zone (TLUC 2.1.4)

PLANNED AREA DEVELOPMENT ZONES: Some parts of the City are zoned as Planned Area Developments (PAD zones, identified by name) that are meant to encourage comprehensive planned development. These zones have distinct regulations that must be adopted by Mayor and Council (TLUC 2.6.3.2). There is an extensive application process for receiving a PAD zone designation (TLUC 2.6.3.6). PAD zones include multiple uses, but must substantially comply with the **GENERAL PLAN**. If you live in a PAD zone, you should contact *Tucson Planning and Development Services Department* for information about raising animals in your Zone. PAD's may have different requirements that supersede other requirements.

PRINCIPAL LAND USE: A land use that is allowed in a zone as a Permitted Land Use or as a Special Exception Land Use. The principal use is generally the primary or predominant activity conducted on a parcel; however, two (2) or more principal uses can be located on the same parcel in some zones (TLUC 3.2.2).

PROPERTY LINE: The **LOT LINE** that defines the exterior limits of a lot **ABUTTING** (TLUC 6.2.1).

SECONDARY USES: Land uses that are permitted within that zone in conjunction with, but subordinate to, a principal Permitted Land Use (TLUC 2.1.6).

SPECIAL EXCEPTIONS: Uses that may be permitted within that zone only if approved through a Special Exception Land Use procedure and if the use complies with any additional conditions listed for the Land Use Class (TLUC 2.1.5).

STOCKYARD OPERATION: A **LAND USE CLASS** in the **AGRICULTURAL USE GROUP** that entails the temporary confinement of **LIVESTOCK** in conjunction with their transport, fattening, or auctioning on a wholesale or retail basis, including feedlots and cattle pens (TLUC 6.3.3.5).

TCC: Acronym for the Tucson City Code, which contains all City ordinances.

TLUC: Acronym for the Tucson Land Use Code, which establishes zones and defines the types of uses that are permitted in each zone.

VICIOUS ANIMAL: any animal that bites, attempts to bite, endangers or otherwise injures or causes to be injured human beings or other animals, (TCC 4-7(d)), except police dogs (TCC 4-7(4)).



Communities Putting Prevention to Work

Made possible by funding from the U.S. Department of Health and Human Services

Presentation by: Irene Ogata

Codifying Paradise



Mitigating the Urban Heat Island

January 18, 2011
City of Tucson Planning Commission

Irene Ogata, FEA, CFM, ASLA, AZAIA
Urban Landscape Manager
City of Tucson
Office of Conservation & Sustainable Development

THEY PAVED PARADISE AND . . .

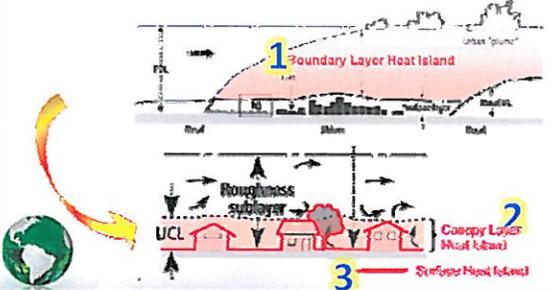
- They paved paradise and put up a parking lot
 - With a pink hotel and a boutique and a swinging hot spot
 - Don't it always seem to go that
 - You don't know what you've got till its gone
 - They paved paradise and put up a parking lot



Jon Mitchell, 1970

UHI Focus

3 Main areas of measure

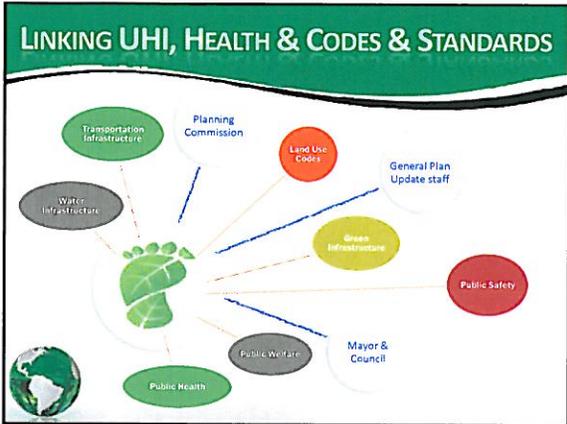


1 Boundary Layer Heat Island

2 Canopy Layer Heat Island

3 Surface Heat Island

UCL Roughness sublayer



LINKING UHI, HEALTH & LAND USE CODES

URBAN HEAT ISLAND & GREEN CODE REVISION STRATEGY LIST

Benefits area of	UHI Mitigation Element	UHI	Shade	Trees	Paving	Roof
1	Urban Heat Island	X	X	X	X	X
2	Green Infrastructure	X	X	X		
2	Transportation			X		
3	Energy Efficiency	X	X	X	X	
4	Waste Resources			X	X	
5	Community Economic Values		X	X		
6	Urban Ecology/Habitat	X	X			X
7	Human Health	X	X	X	X	X
8	Parks & Recreation	X	X			



BUNDLE 1: CLARION RECOMMENDATIONS
WATER QUALITY & CONSERVATION

- #1: Facilitate "green" Renovations/Expansions to Non-Conforming Buildings
 - incentivize green retrofits



BUNDLE 1: CLARION RECOMMENDATIONS
URBAN FOOD

- #2: Allow Cisterns in Setbacks
 - not directly affecting UHI, but conservation of water resource that can be utilized to green, or cool surface of surrounding area



BUNDLE 1: CLARION RECOMMENDATIONS
GREEN BUILDING

- #8: Allow Shade Structures in Setback
 - not directly affecting UHI, but conservation of water resource that can be utilized to green, or cool surface of surrounding area



BUNDLE 1: CLARION RECOMMENDATIONS

GREEN BUILDING

- #9: Require or Encourage Cool Roofs
 - minimum level of solar reflectance for all roofs



FUTURE TARGETED RESEARCH

- Pervious Materials (reduce barriers)
- Encourage Trees & Green Infrastructure in Street Rights of Way (new)
- Solar Reflective Paving Materials (new/incentivize)
- Narrower Streets (remove barrier)
- Public Land Access Maintenance (new)
- Heat Island Analysis (new)
- Planting of Native Vegetation along Waterways (new)



... TEAR DOWN THE PARKING LOT



... AND ...



irene.ogata@tucsonaz.gov
