

# MEMORANDUM

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Planning and Zoning Division  
Department of Community Development

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**TO:** Planning Commission

**FROM:** Marilyn Lewis, Principal Planner

**DATE:** November 28, 2007

**SUBJECT:** Petition #400-07-18 RCO Riparian Corridor Overlay District  
Item tabled from the November 14, 2007 Hearing

## **Background**

On November 14, 2007 the Salt Lake City Planning Commission tabled a decision on the aforementioned petition to have staff make revisions in the draft Riparian Corridor Overlay ordinance that would address some of the key issues that were raised during the public hearing. This memorandum is supplemental to the November 14, 2007 staff report.

Staff met with community members that volunteered their services to gather information and provide input from their neighbors for revisions to the proposed Riparian Corridor Overlay ordinance. Their efforts in working with staff under stringent time constraints were greatly appreciated. Staff has made these revisions to balance the protection for the streams (as directed by the City Council) and provide some level of flexibility to property owners. The key revisions from the November 14, 2007 staff report are as follows:

## **Planting Materials and Methods**

Planning and Public Utilities staff determined that information on the desired and undesired plant material for the proposed Riparian Corridor Overlay (RCO) can be included in one of the annual pamphlets that they produced to disseminate information to the public. The same information can be posted on the Public Utilities web site. Since the hearing staff has received numerous emails where community members are working together to teach or get additional instruction on what is appropriate within a stream corridor.

In light of the opportunities for education and the goal to provide additional information, the RCO was revised to remove the request for plan approval solely for planting projects. Landscape plans must still be submitted for new construction projects. These plans must show existing vegetation, any proposed plant materials required by the base zone or Section 21A.48 Landscape and Buffers, as well as materials to be removed.

## **Stream Study**

Public Utilities could develop criteria and hire a consultant for a study that would utilize existing information and gather specific data along each stream. Once Public Utilities has the data and recommendations, meetings can be held with residential communities and businesses to look at guidelines that are appropriate along their stream. The document could have information on plant materials, examples of good and bad construction method, a listing of who to call for a specific issues. The guidelines could then be adopted by the City and referenced in the ordinance.

### **Replacement or Rebuilding of a Pre-Existing Structure**

Property owners must replace with the same type of structure, or a structure of lesser impact as pursuant to the base zoning district. No portion of the footprint of the new structure can be closer to the Annual High Water Level than the nearest point of the previous structure. The total square footage of the portion of the footprint of the new structure to be located within Areas A and/or B shall not exceed the total square footage of the footprint of the old structure as it was located within Areas A and/or B. The new structure must comply with the requirements of the base zoning district. If it does not then the property owner may be heard by the Board of Adjustment.

In the ordinance property owners can retain the footprint of the existing structure. In some cases that may be problematic when an existing structure is too close to the stream bank and vulnerable to the effects of erosion. This revision allows flexibility when existing structures are too close to the stream bank. Property owners may rebuild in a manner that would keep them from losing their structure due to erosion. This also protects the stream bank by moving the structures further away.

### **New Development**

New development on existing legal lots or parcels must meet the requirements of the RCO and the base zoning district. If a lot is rendered not buildable solely by application of the RCO it may be heard by the Board of Adjustment.

### **Outdoor Uses**

The new draft ordinance allows property owners to create safe passage by the use of stairways between vertical levels on a property. This controls random access points, which reduces erosion. Open patios and decks (max. 2 foot height) are allowed in Area B, and at grade open patios and decks up to 150 square feet are allowed in Area A. These installations will require a Riparian Protection Permit from Public Utilities.

### **Riparian Protection Permit**

Public Utilities can design this process in any manner that they perceive that provides customer service and efficiency.

### **Recommendation**

The Planning Commission must transmit a recommendation to the City Council.

Based on the findings of fact identified in the staff report, staff recommends that the Planning Commission make the following recommendations to the City Council:

1. That the proposed Zoning Text Amendments are consistent with the Standards listed in the Zoning Ordinance (A - E). The Planning Commission recommend approval based on the following:

- A. The proposed amendment is consistent with the purposes, goals, objectives, and policies of the adopted general plan of Salt Lake City.
- B. The proposed amendment is harmonious with the overall character of existing development in the immediate vicinity of the subject property.
- C. The proposed amendment will not adversely affect adjacent properties.
- D. The proposed amendment is consistent with the provisions of any applicable overlay zoning districts, which may impose additional standards.

Therefore, based on these revisions in this supplemental memorandum the Planning Commission forward a favorable recommendation to the City Council for the proposed ordinance 21A.34.130 RC Riparian Corridor Overlay District and the proposed changes to Section 21A.34.050 LC The Lowland Conservancy Overlay District.

2. The Planning Commission should further recommend that the City Council fund a stream study through the Public Utilities Department to gather specific data for each of the streams within the Riparian Corridor Overlay District to develop a guidelines document.



## DRAFT

### 21A.34.130 RCO RIPARIAN CORRIDOR OVERLAY

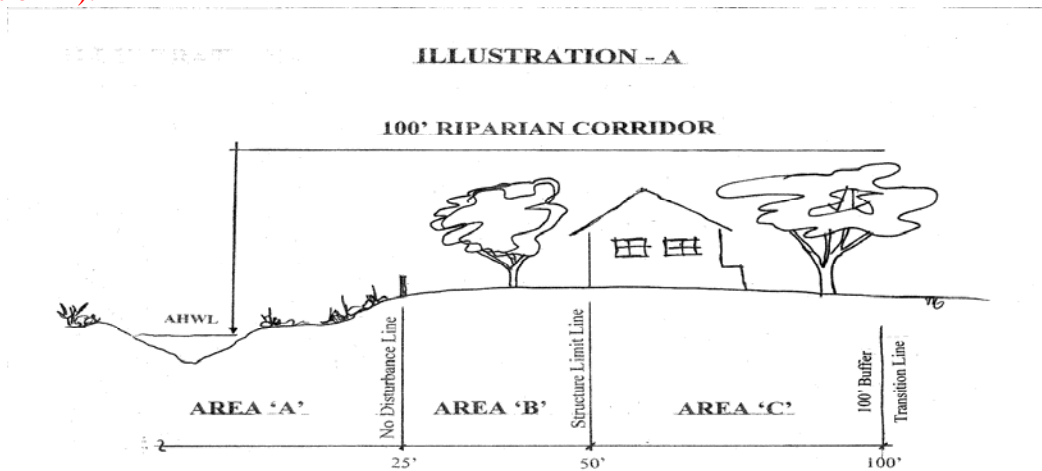
**A. Purpose Statement.** The purpose of the Riparian Corridor Overlay (RCO) is to minimize erosion and stabilize stream banks, improve water quality, preserve fish and wildlife habitat, moderate stream temperatures, reduce potential for flood damage, as well as preserve the natural aesthetic value of streams and wetland areas of the City. This overlay provides protection for all stream corridors and wetlands east of the Interstate 215 Highway and includes City Creek, Red Butte Creek, Emigration Creek, the Jordan River and Parleys Creek and their tributaries. Canals and irrigation ditches are not included. The Surplus Canal and water courses west of Interstate 215 are protected under Section 21A.34.050 LC Lowland Conservancy Overlay District. The requirements of this District shall supplement other applicable codes and regulations, including State and Federal regulations and the Salt Lake City Floodplain Ordinance. The RCO does not relieve the obligation for compliance with all other land use and zoning regulations applicable to a property.

#### **B. Delineations:**

Any Boundaries and Delineations required under the RCO shall be prepared by a licensed professional Hydraulic Engineer, Hydrologist, Wetlands Scientist, Fluvial Geomorphologist or equivalent environmental science professionals. All delineations are subject to the approval of the Public Utilities Director. The Riparian Corridor shall be delineated at the annual high water level on the bank taking into consideration the characteristics of the surrounding area. Where the annual high water level cannot be found, the top of the channel bank may be substituted under the approval of the SLC Public Utilities Director or his designee. The Army Corps of Engineers must have approved any required wetland delineation prior to submittal to the Public Utilities Director. If a wetland occurs within and extends beyond the 100 feet or the Riparian Corridor, the outermost edge of the wetland will determine the outer edge of the Riparian Corridor.

#### **C. Minimum Setbacks for New Construction, Additions and Accessory Structures.**

The following minimum setbacks shall be required within the Riparian Corridor (see 21A.34.132 Illustration A):



1. **Riparian Corridor** is a one hundred (100) foot transition buffer measured from the Annual High Water Level of the adjacent water course and/or wetland. This area may be extended for wetlands as described in 21A.34.130 (B). No leach fields, storm water retention ponds, detention basins or commercial parking lots shall be located within the Riparian Corridor. No person or organization shall engage in any ground-disturbing activity that will remove, fill, dredge, clear, destroy, armor, terrace or otherwise alter this area through manipulation of soil, or other material except as allowed by this ordinance and the Public Utilities Director, the U.S. Army Corps of Engineers and/or other government authorities where applicable. The following areas are established within the Riparian Corridor Overlay:

a. **No Disturbance Line** is measured twenty-five feet (25) from the AHWL (Area A). This is the outermost limit that prohibits disturbance. No new construction shall occur closer than twenty-five (25) feet horizontally to the annual high water level. Approved activities within Area A which are allowed without a Riparian Protection Permit include: (1) manual removal of storm debris and trash by property owner; (2) pruning or removal of trees along utility easements by the responsible entity; (3) removal of invasive plants; (4) planting of native non-invasive vegetation or other approved groundcover, shrubbery and trees on the List of Approved Vegetation Within Riparian Areas published by the Public Utilities/Urban Forester; (5) maintenance of existing fences and structures within the original footprint as long as armoring of the stream bank is not required, and there is no instability due to movement of a steep slope and the proposed construction activities in the has been approved by the Army Corps of Engineers under the Clean Water Act or the Rivers and Harbors Act, or by the State Engineer under the Stream Alteration Permit Program.; (6) Outdoor residential use areas in Area A which require a Riparian Protection Permit and do not require the use of heavy equipment: (i) new construction or maintenance of access stairs between vertical levels in Area A, and (ii) open patios and decks on grade and not greater than 150 square feet, and no more than one per level in terraced areas.

b. **Structure Limit Line** is measured fifty feet (50) from the AHWL (Area B). This delineates the limit where any type of construction (landscape walls, additions, accessory structures or new construction) can occur. Approved activities within Area B which are allowed without a Riparian Protection Permit include: (1) activities described in 21A.34.130(C)(1)(a); (2) new construction of fencing; (3) construction of open patios and decks with footings with a maximum of 2 feet above grade; (4) minimal grading; (5) compost from yard debris; (6) mechanized removal of fallen or diseased trees. (7) replacement or rebuilding of a pre-existing structure in Area B requires a Riparian Protection Permit; (i) replaces a pre-existing structure with the same type of structure or a structure of lesser impact as pursuant to the base zoning district, (ii) no portion of the footprint of the new construction is any nearer to the AHWL than the nearest point of the pre-existing structure to the AHWL, (iii) the total square footage of the portion of the footprint of the new structure to be located within Areas A and/or B shall not exceed the total square footage of the footprint of the old structure as it was located within Areas A and B, (iv) the new construction does not require armoring of the stream bank is not required, there is no instability due to movement of a steep slope, unstable soils or geological activity along a fault has not occurred and caused changes to the ground that are so severe it will not support the previous structural foot print, (v) the new structure must comply with the requirements of the base zoning district, if the new structure will not comply with the base zoning district it may be appealed to the Board of Adjustment.

c. **Buffer Transition Line** is measured one-hundred (100) from the AHWL (Area C). All development activities permitted by the base zone are allowed within Area C, as well as those described in 21A.34.130(C)(1)(b) without a Riparian Protection Permit except leach fields, storm water retention ponds, detention basins or commercial parking lots.

2. **Riparian Protection Permit.** This permit is supplemental to the standard construction/building permits and associated process. If a property owner cannot comply with the RCO or a specific activity in this ordinance requires a Riparian Protection Permit, the property owner may submit an application for a Riparian Protection Permit with the Director of Public Utilities (See Section 21A.34.130E) Riparian Protection Permit). The Director of Public Utilities shall issue a Riparian Protection Permit for the proposed use or activity provided the following criteria have been satisfied to the satisfaction of the Director of Public Utilities: (a) the applicant submits documentation that the construction associated with the activity will not result in the discharge of sedimentation or soils into any water body, wetlands and the existing down hill storm drains must be protected; (b) the proposed development will result in equal or better protection for the riparian area because the riparian area will be restored, buffered, or enhanced through other special measures; and (c) the proposed activity or use will not authorize alterations to occupy more than 50 percent of the total area within Area A and B, or an existing legal lot or parcel proposed for development is rendered not buildable solely by application of the RCO. Denial of a Riparian Protection Permit may be appealed to the Board of Adjustment.

**D. Steep Slopes and Soil Stability Standards.** As part of a Riparian Protection Permit, the Public Utilities Director can require a geotechnical report and impose greater setbacks for structures or buildings from the Structure Limit Line to ensure safety. Proposed projects will be reviewed on an individual basis. When unstable soils are suspected regardless of the slope, the Public Utilities Director may require a geotechnical report, increase the No Disturbance Line as well as impose greater setbacks for structures or buildings from the Structure Limit Line to ensure safety. Replacement or repair of existing retaining structures requires Riparian Protection Permit. Proposed projects will be reviewed on an individual basis.

**E. Riparian Protection Permit Application.** In addition to the standard drawings for permit review, an application for a Riparian Protection Permit shall submit the following to the Public Utilities Department (and the Urban Forester for plant material):

1. Plans shall be at a scale of 1"= 20' minimum. Sections requiring a horizontal and vertical scale shall be equal (example: Horizontal 1"=10', Vertical 1"=10').
2. All site plans shall have existing and proposed grades with two foot contour intervals.
3. Native vegetation should be identified by location, type and size. The proposed removal of any vegetation must also be identified.
4. Cross section drawings showing the riparian corridor, building setbacks and location of proposed structures.

5. 100 year flood plain, past flood hazard areas, geological faults, high liquefaction areas and slopes 30% or greater must all be identified.
6. The applicant shall also submit any geotechnical or hydrological reports required as determined by the Public Utilities Department.
7. Habitat of any threatened or endangered species of aquatic and terrestrial flora or fauna shall be identified on the plan.
8. If wetlands exist on the parcel, a wetlands delineation approved by the Army Corps of Engineers.

#### **F. Definitions**

1. **Annual High Water Level (AHWL)** - Annual high water level means the highest level water reaches annually, on average on the shore and is identified by: fresh silt or sand deposits, the presence of litter and debris, or other characteristics indicative of high water levels.
2. **Armoring** – A protective covering of a stream’s bed or banks with erosion-resistant material such as rock, concrete or stone filled gabion baskets. Armoring increases the stream flow velocity, which causes further damage on opposite down stream banks. Armoring can increase water temperatures, which affects riparian habitat and water quality.
3. **Stream** – A flowing body of water confined within a defined bed and banks. Streams may have continuous or periodic flow. Streams are important as conduits in the water cycle, instruments in aquifer recharge, and corridors for fish and wildlife migration. Stream is also an umbrella term used in the scientific community for all flowing natural waters, regardless of size (brook, creek, kill, rill, or run). Streams include intermittent or seasonal water bodies, which exist for long periods, but not all year round. They do not include Ephemeral creeks, streams, rivers, ponds or lakes that only exist for a few days following precipitation or snowmelt.
4. **Wetland** –Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

## **DRAFT CHANGES**

### **21A.34.050 LC Lowland Conservancy Overlay District:**

A. Purpose Statement: It is the purpose of this District to promote the public health, safety and general welfare of the present and future residents of the City and downstream drainage areas by providing for the protection, preservation, proper maintenance, and use of the City's watercourses, lakes, ponds, floodplain and wetland areas. The requirements of this District shall supplement other applicable codes and regulations, including State and Federal regulations and the Salt Lake City Floodplain Ordinance.

B. Lowland Protection Areas: Areas protected by the LC Lowland Conservancy Overlay District encompass areas consisting of waterbodies such as streams, lakes, ponds and wetlands **west of Interstate 215**, as identified on the Zoning Map, and also ~~the Jordan River and~~ the Surplus Canal. These areas are referred to herein as lowland protection areas.

C. Lowland Protection Area Standards:

1. Setback Required: A nonbuildable setback area around the waterbodies described in subsection B of this Section above shall be required. The nonbuildable setback shall be fifty feet (50') for nonresidential uses and twenty five feet (25') for residential uses from the boundary line of the LC Lowland Conservancy Overlay District as identified on the Zoning Map, or from the banks of the ~~Jordan River or~~ Surplus Canal.

2. Permitted Uses: No development or improvement to land shall be permitted within the limits of a waterbody. Within the setback area identified in subsection C1 of this Section, permitted uses shall be limited to the following, subject to the other requirements of this District.

a. Agricultural uses, provided such uses are permitted in the underlying district and do not involve any grading, earthmoving, modification of site hydrology, removal of wetland vegetation or construction of permanent buildings/structures;

b. Open space and recreational uses that do not involve any grading, earthmoving, modification of site hydrology, removal of wetland vegetation or construction of permanent buildings/structures.

3. Conditional Uses: Within the limits of a waterbody, conditional uses shall be limited to those involving only limited filling, excavating or modification of existing hydrology, as listed below:

a. Boat launching ramps;

b. Swimming beaches;

c. Public and private parks including wildlife and game preserves, fish and wildlife improvement projects, and nature interpretive centers;

d. Boat docks and piers;

e. Roads and bridges;

f. Observation decks and walkways within wetlands;

g. Repair or replacement of existing utility poles, lines and towers; and

h. Watercourse relocation and minor modifications.

Within the setback area, conditional uses shall be limited to the following.

a. All uses listed above;

b. Stormwater drainage and detention facilities;

c. Pedestrian paths and trails; and



d. Public and private open space that requires grading or modification of site hydrology.

4. Natural Vegetation Buffer Strip: A natural vegetation strip shall be maintained along the edge of the stream, lake, pond or wetland to minimize erosion, stabilize the streambank, protect water quality, maintain water temperature at natural levels, preserve fish and wildlife habitat, to screen manmade structures, and also to preserve aesthetic values of the natural watercourse and wetland areas. Within the twenty five foot (25') natural vegetation strip, no buildings or structures (including paving) may be erected, except as allowed by conditional use. However, normal repair and maintenance of existing buildings and structures shall be permitted. The natural vegetation strip shall extend landward a minimum of twenty five feet (25') from the ordinary high water mark of a perennial or intermittent stream, lake or pond and the edge of a wetland. The natural vegetation strip may be interrupted to provide limited access to the waterbody.

Within the natural vegetation strip, trees and shrubs may be selectively pruned or removed for harvest of merchantable timber, to achieve a filtered view of the waterbody from the principal structure and for reasonable private access to the stream, lake, pond or wetland. Said pruning and removal activities shall ensure that a live root system stays intact to provide for streambank stabilization and erosion control.

5. Landscape Plan Required: A landscape plan shall be submitted with each conditional use permit application for development activity within the LC Lowland Conservancy Overlay District and contain the following:

- a. A plan describing the existing vegetative cover of the property and showing those areas where the vegetation will be removed as part of the proposed construction;
- b. A plan describing the proposed revegetation of disturbed areas specifying the materials to be used. The vegetation must be planned in such a way that access for stream maintenance purposes shall not be prevented **and should be reviewed by the Urban Forester**; and
- c. Such a plan shall be in conformance with the requirements of Part IV, Chapter 21A.48 of this Title.

D. State And Federal Permits Required: A conditional use shall not be granted unless the applicant has first obtained a section 404 permit from the Army Corps of Engineers and a stream alteration permit from the Utah State Department of Natural Resources, Water Rights Division, as applicable.

E. Conditional Use Standards: In addition to demonstrating conformance with the conditional use standards contained in Part V, Chapter 21A.54 of this Title, each applicant for a conditional use within the LC Lowland Conservancy Overlay District must demonstrate conformance with the following standards:

1. The development will not detrimentally affect or destroy natural features such as ponds, streams, wetlands, and forested areas, nor impair their natural functions, but will preserve and incorporate such features into the development's site;
2. The location of natural features and the site's topography have been considered in the designing and siting of all physical improvements;
3. Adequate assurances have been received that the clearing of the site topsoil, trees, and other natural features will not occur before the commencement of building operations; only those areas approved for the placement of physical improvements may be cleared;

4. The development will not reduce the natural retention storage capacity of any watercourse, nor increase the magnitude and volume of flooding at other locations; and that in addition, the development will not increase stream velocities;
  5. The soil and subsoil conditions are suitable for excavation and site preparation, and the drainage is designed to prevent erosion and environmentally deleterious surface runoff;
  6. The proposed development activity will not endanger health and safety, including danger from the obstruction or diversion of flood flow;
  7. The proposed development activity will not destroy valuable habitat for aquatic or other flora and fauna, adversely affect water quality or groundwater resources, increase storm water runoff velocity so that water levels from flooding increased, or adversely impact any other natural stream, floodplain, or wetland functions, and is otherwise consistent with the intent of this Title;
  8. The proposed water supply and sanitation systems are adequate to prevent disease, contamination and unsanitary conditions; and
  9. The availability of alternative locations not subject to flooding for the proposed use.
- (Ord. 26-95 § 2(17-4), 1995)