SAN RAFAEL RIVER BASIN

INTRODUCTION – From Fall Semester Syllabus

Residents of the San Rafael River Basin (SRRB) have witnessed a slow but consistent level of land-use development throughout the region. Portions of that growth and development have precipitated the need to develop a landscape-level process in order to maintain the context of their region and community identity in the coming years. The purpose of this study is to research and develop a process that identifies current and future land-use issues throughout the SRRB. The identification of these issues by various stakeholders will help to provide a framework for future policy decisions.

In pursuit of future policies, it is proposed to identify the most beneficial spatial patterns in the region based upon cultural, ecological, and economic considerations. The interactions and cause and effect relationships that exist between these three elements will identify common areas which support critical landscape services with respect to public health, safety and welfare. The study will also review the cultural and economic history in the region which will help resolve land-use and policy conflicts between future development and management activities. The identification and understanding of landscape resources and why and how those resources should clarify land planning and design decisions for stakeholders will be a major emphasis of this work. Those landscape resources are imbedded in a complex pattern of ownership which will challenge the compatibility of new policies (wilderness areas, USFS, National Rec. Area, National Monument, BLM, SITLA, tribal, Utah wildlife reserves, and private lands). In general, landscape-level issues such as extractive energy, residential development, agriculture, and wildlife have received minimal attention in traditional community masterplans. Landscape-level concerns like water quality and quantity, public health, air quality, safety, and welfare tend to go unnoticed as part of future development scenarios. These attributes are important in helping to establish and maintain the quality of life for the communities within the basin.

OBJECTIVES:

The objectives of the study are to develop a landscape-level approach for the analysis of public and private lands within the SRRB. A contextual template will be established in order to limit the spatial scope of research. The study will take into account, but not be limited to, those issues noted above. Broadly, the objectives are:

- Create a GIS database describing various biophysical and socio-demographic characteristics of the study area, including the basic land use infrastructure of the region. This database will consist of existing sources of data available from Utah AGRC and other mapping areas;
- Develop objective definitions and criteria by which regionally-significant landscape elements can be identified and evaluated within the study area, and its regional context;
- Develop strategies to protect regionally-significant critical lands considering attributes like public health, welfare and safety; connectivity between local and regional patterns and biodiversity.
• Assess likely future growth and land use patterns in relation to landscape and natural resources, and prioritize areas to be considered for management and/or protection under current land ownership.
• Investigate and assess the benefits and shortcomings of land ownership exchanges between BLM and SITLA – (Project Bold and SITLA Proposals) with respect to proposed alternative futures.
• Distribute relevant material and study conclusions to local and state stakeholders.

The merit of the study will serve to provide stakeholders and policy makers in the Basin with a background for future environmental and development policies within the region. The study has the potential for a broader contribution to future planning in the region by providing relevant data, methodologies and models for conducting additional evaluations on the impacts and benefits of growth in the study area over the next ten years.

OVERVIEW

PROCEDURES AND PHASES

7 January – 23 January  Phase I

As briefly outlined in the fall semester syllabus, the activities for this semester will focus on the development and refinement of future scenarios for the study area in order to assess the impacts of that development on projected open space needs, opportunities, and recommendations. The preliminary activity allocation models and assessment models identified at the end of last semester will be expanded in number and refined for spatial confirmation. The documentation and description of the activity allocation models, including acceptable performance levels, will also be noted at this time. Weather and site conditions permitting, the models will be field checked for spatial accuracy and validity of objectives.

The preliminary assessment models will follow a similar program of refinement and documentation. They will also be field checked for spatial accuracy and validity of objectives. This work will constitute the first three weeks of the semester. All draft A/E models due on 23 January at 2 p.m.

EVALUATION CRITERIA, ACTIVITY & ENVIRONMENTAL ASSESSMENT MODELS

Preliminary Activity Allocation Models - A.A.M./ Land Use

During this phase of the study there will be several activities taking place. The first will consist of research into those land uses and other issues noted above in Full Scale Analysis – Function and Structure. This will be done in order to refine their functional and spatial characteristics, which will then be represented in diagrammatic models. If time and weather permits each model will be printed out and verified in the field for its accuracy. Second and third iterations may be necessary in order to fine-tune the objectives of each model. These models will act as the basis for the construction of future scenarios and evaluation models.

Preliminary Environmental Evaluation Models - E.E.M.

The format for the second activity will closely follow that of the first. The primary difference is that the research in this area will cover the identification, description, and construction of those models, which are considered important to the continued functional operation of the biophysical base while at the same time allowing new uses to occur. These models will also act as part of the basis for future land use priorities. Mitigation strategies, if appropriate, will also be tied to the performance of these models. In like manner,
this work will take into account those issues noted above in Full Scale Analysis – Function and Structure. This work will culminate in a preliminary outline and be presented to stakeholders for review and feedback.

Based upon comments from stakeholders, a set of objectives and criteria will be established for several alternative futures programs including a description of various objectives. The research, analysis and definition of each program will be documented as a specific model, which can be converted into spatial display. Individual programs and/or their combinations will be printed for field verification. This work will also culminate in a preliminary outline and be presented to stakeholders for review, feedback, and revisions as necessary.

28 January – 6 February  Phase II

The following two weeks will consist of a review and response to comments and recommendations from the 2011-12 study on BLM/SITLA Exchanges (Spatial Conversions and Alternative Futures: SITLA/BLM: A Preliminary Analysis). These may take the form of additional spatial analysis for both futures and assessment. The suggested exchanges may have additional constraints placed on them or may have some criteria removed from those which were previously developed. Some of the recommendations may go beyond biophysical factors to include policy/political agendas from various stakeholders. These will be discussed and resolved within the team, and in each case, will be presented to and discussed with faculty and stakeholders.

11 February – 20 February  Phase III

This time period will focus on the preliminary resolution of the objectives and benefits of several alternative futures. This will include variations in both the existing land use and the proposed exchange plan. The class will also discuss and identify a range of feasible implementation and/or mitigation strategies for the futures. These preliminary documentations will also include broad recommendations to overcome shortcomings identified in previous reviews.

25 February – 6 March  Phase IV

This two week period will allow each individual to research and investigate some of the implementation and/or mitigation strategies in more detail. These will cover those which fall under local jurisdictions (town or country), state, and federal. The primary objective is to suggest, by way of explicit criteria, recommendations for the proposed futures and assessment models. This research and documentation will be critical for presentations in the public arena.

10 March – 14 March  Spring Break

27-28 March – Stegner Symposium, University of Utah

18 March – 24 April  Phase V

The last phase of work will include three activities. The first will be the layout and preparation of the final report. This will include the compilation of written and graphic work from all phases of the study beginning fall semester. This will have to be completed in digital format by the 16th of April in order to have the reports printed. Portions of this work will, by necessity, also be taking place in the previous phase. The second item will consist of the production of presentation posters to be used as part of our final presentation. These are dependent upon the progress of the report (due 22 April). The third activity will be the design and construction of a power point program for our final presentation on Thursday, 25 April which should include the report and posters.
Summary of goals/objectives and assessment

As a result of the survey and stakeholder meetings, the study team will articulate strategies for the resolution of future development scenarios.

Objectives:
- Resolution and prioritization of stakeholder issues
- Brainstorming of strategies and future scenarios
- Preliminary identification of implementation strategies
- Fitness of SITLA/BLM Exchanges

Assessment:
- Documentation and development of future scenarios
- Testing of scenarios for spatial and data accuracy on existing land use
- Testing of scenarios for spatial and data accuracy on exchanges

The final phase of work will be the testing and evaluation of the scenarios against the activity and evaluation models developed earlier including their compatibility with spatial alternatives. (exchanges)

Objectives:
- The comparison of future scenarios to determine *best* performance for support of spatial alternatives
- To define new strategies and implementation tools if needed (exchanges)

Assessment:
- Documentation of futures evaluation in response to open space plans
- Documentation of new strategies, policies, and mitigation recommendations

The study will conclude with the preparation of a final report and presentation of all material to the various stakeholders.

Objectives:
- Compilation of all written and graphic work representing all phases of the study
- Design and layout of posters summarizing the study
- Design a PowerPoint presentation for stakeholder and public meetings

Assessment:
- Production of final report with appropriate CDs
- Production of final posters
- Presentation of study to major stakeholders

Evaluation

- Assess Landscape Patterns of Land Use and Critical Landscapes 25%
- Review and Response 5%
- Final Resolution/Alternative Futures and Assessment Models 15%
- Spatial Analysis on SITLA/BLM Exchanges 15%
- Concept Evaluation and Documentation, Conflicts or Compatible Strengths and Weaknesses 20%
- Documentation and Production of Final Report 20%

Additional Studio Activities:
Note- The class should be prepared for lectures and/visitor presentations on Tuesday from 1:30 - 3:00 p.m. The remaining time and class time on Thursday (1:30-4:30) should be reviewed as studio research and production activities. The class should also be prepared for guest lectures on Wednesday from 10:30-11:20

Any changes to this schedule will be announced in class. In addition, you may also be required to attend special lectures and/or workshops on or off campus which develop during the semester. e.g., Stegner Symposium – U of U.

Documentation, Draft Report

All papers and reports are to be as brief as possible, commensurate with adequate communication and explanation, and written in clear and grammatical English. They should be outlined carefully using a simple hierarchy of letters and numbers, decimals or other system for emphasis of ideas; and typed on one side of 8 ½” x 11” paper. We will use a standard journal entry which will be announced in class. Proofread your paper before you hand it in! Keep copies of all papers. Special attention must be given to “credits” for quotations and ideas from whatever source.

Professor Richard E. Toth
Office phone: 797-0694
Email: richard.toth@usu.edu
Office hours: by appointment but try to work around Wednesday and Thursday
8:30-9:30, QNR 336

Studio teaching assistant:
Matthew Coombs (coombs.matt@yahoo.com)

Professor Barty Warren Kretzschmar
Office phone: 797-4293
Email: barty.warren@usu.edu
Office Hours: by appointment but try to work around Wednesday and Thursday
8:30-9:30, QNR 353-A

Faculty Studio Associates:

Karin Kettenring
797-2546, NR 354
karin.kettenring@usu.edu

Fee Busby
BNR 275
797-2319
fee.busby@usu.edu

Nancy Mesner
NR 104A
nancy.mesner@usu.edu