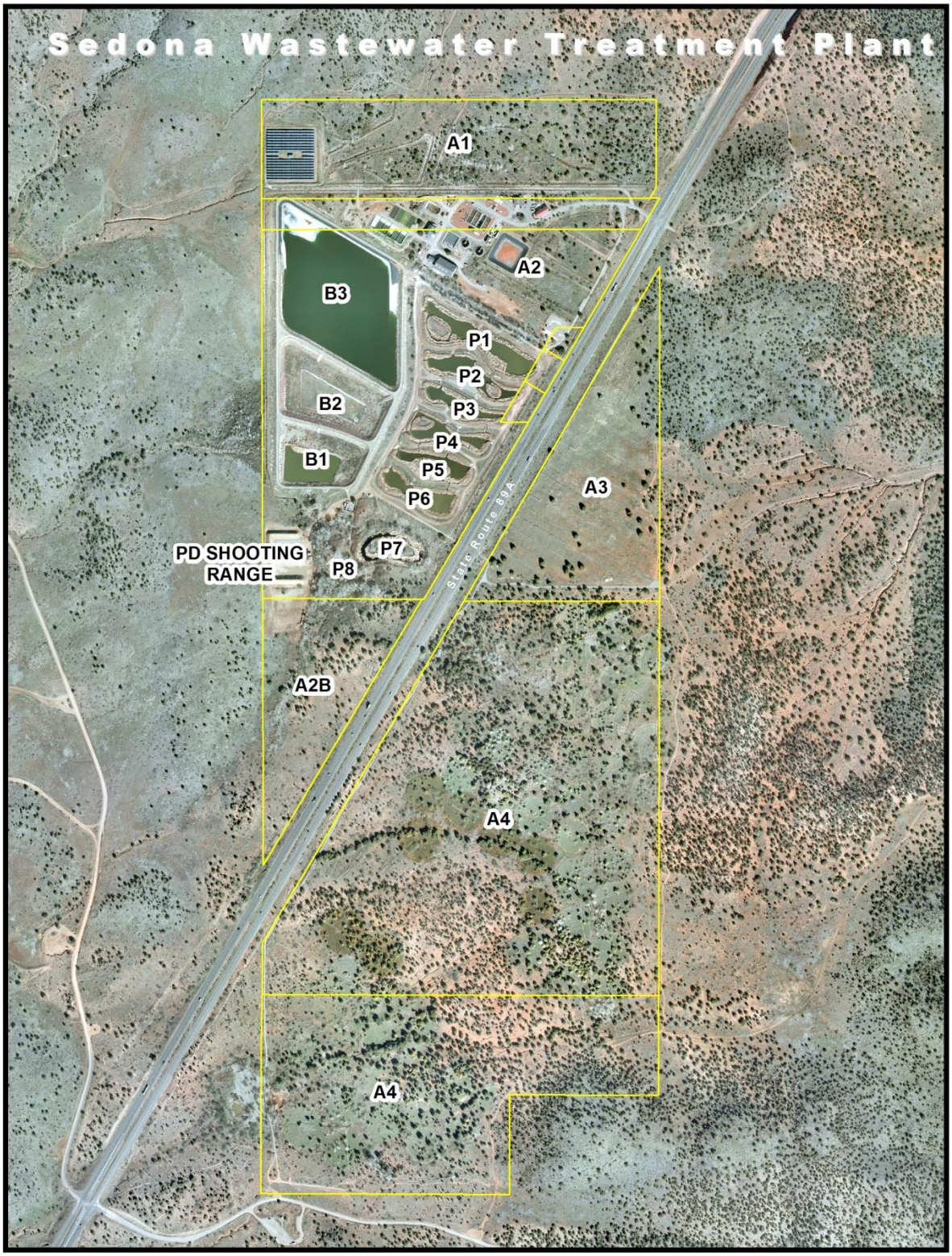
DELLS LAND USE GROUP REPORT

SEPTEMBER 2015

A report to the Sedona City Manager containing concepts regarding use of a portion of the Wastewater Treatment Plant designated Area 4 being a portion of the 2014 Sedona Community Plan identified as Community Focus Area 13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B2
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DELLS LAND USE GROUP REPORT

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EXECUTIVE SUMMARY

DELLS LAND USE GROUP REPORT

At its February 26, 2014 meeting the City Council approved an Effluent Management Plan. Implementation of the plan would result in approximately 200 acres of the Wastewater Reclamation Plant (WWRP) lands no longer being necessary for effluent management. The Community Plan approved by the voters on March 11, 2014 identified the plant as Community Focus Area 13. Tim Ernster, who was City Manager at the time, appointed a Citizen Working Group to provide input to City staff as part of the concept development process for uses in the 200 acres. On July 24, 2014 the group began meeting.

The group adopted the name Dells Land Use Group, (DLG) based upon a previous designation of the area as the Dells. The following purpose statement was adopted: "*To make conceptual level recommendations to City staff of use concepts and uses for approximately 200 acres at the Wastewater Plant- mainly in Irrigation Area 4.*" The group meetings were facilitated by City Manager, Tim Ernster and Director of Wastewater, Charles Mosley. The group generally met once to twice a month through August 2015. The planning area is shown in Fig ES-1.

The members of the group are listed below:

1 Rob Adams	8 Maria Tonello
2 Paul Chevalier	9 Jennifer Wesselhoff
3 Mark DiNunzio	10 John Wesnitzer
4 Dena Greenwood	11 Tim Ernster[1]
5 Andrea Houchard	
6 Max Licher	
7 Gerhard Maver	

The work of the DLG proceeded through several phases to reach its goal of developing a conceptual land use plan for the 200 acres at the Wastewater Reclamation Plant. Those phases

[1] Tim Ernster was appointed a member of the Group upon his retirement in February 2015

were an orientation phase, an information gathering and criteria development phase, a concept development phase, and finally a report writing phase.

This group considered several issues that related to uses in the area. Besides working within the context of the Effluent Management Plan's vision of ceasing to irrigate approximately 200 acres with effluent, attention was paid to the 2013 Community Plan, which designated this area as Focus Area 13. The uniqueness of this area as a City planning area was acknowledged in that it is outside the boundaries of the City of Sedona. Development of the land is subject to regulation by Yavapai County. The planning area land, however, is part of approximately 411 acres of land owned by the City and designated as the Sedona Wastewater Reclamation Plant. The approximately 200 acres of land that is the subject of the DLG report was acquired from the United States Forest Service in a land trade as part of a transaction referred to as the Woo Ranch trade. The land is bounded by Forest Service lands (east and south), City of Sedona land (north) and W SR 89A (west).

DLG considered many land uses, including the no development option. It is the consensus of the DLG that any plan for the "Dells Land Area" on the east side of the SR 89A should respect and maintain the scenic qualities of this western gateway into the Sedona/Red Rocks area. DLG was unable to reach consensus on a single vision that would best accomplish this consensus principle. In light of this the group decided to present a report containing the majority vision and the minority vision.

The majority favored vision is that the foreground as seen from the highway approach should remain natural and/or rural in character, so that the gateway view shed is preserved. On the eastern side of the 200 acres the majority proposes the placement of several community and agricultural uses. The majority states that this vision is compliant with two concepts in the Community Plan. The Sedona Community Plan relative to Focus Area 13: Wastewater Treatment Plant, states that as a Community Expectation, planning for the property should "Consider only future uses that are environmentally sensitive, that retain an open space character." Community Expectations are also stated in the Sedona Community Plan that development of the Dells area should "contribute to Sedona's environmental and economic sustainability".

The majority vision's proposed development proposes the following land uses on the eastern side of The Dells:

1. Amphitheater & Multi-purpose Fields
2. Botanical Garden & Horticultural/Restoration Institute
3. Research/Education Center

4. Vineyards, Winery & Tasting Room

5. Orchards & Agricultural Greenhouses

6. Campground

7. Staff housing

The majority vision identifies a number of benefits that may accrue upon implementation of the vision, however it is realized that there is much work that would need to be accomplished prior to implementing the vision or elements of it. Although this combination of the arts with agriculture tie threads of our community history together in a location that links us to the greater Verde Valley region , the majority understands that feasibility studies may resize elements of the vision. If such resizing were needed and elements of the vision needed to be dropped DLG developed a prioritization of the uses that is presented in Table ES-4.

Figure ES-1

Community Focus Area 13: Wastewater Treatment Plant

1:22,000
Note: Image is for illustration purposes only - actual boundaries and affected parcels will be determined through the future CFA planning process.

Attributes

- The 400-acre property is located four miles west of the Sedona city limits and is owned by the City.
- Site of the wastewater treatment facility for the City of Sedona.
- The Sedona Wetlands Preserve ponds provide for effluent evaporation and wildlife habitat with public access.
- This area is outside the City; however, future planning for the site will have a significant public involvement process.

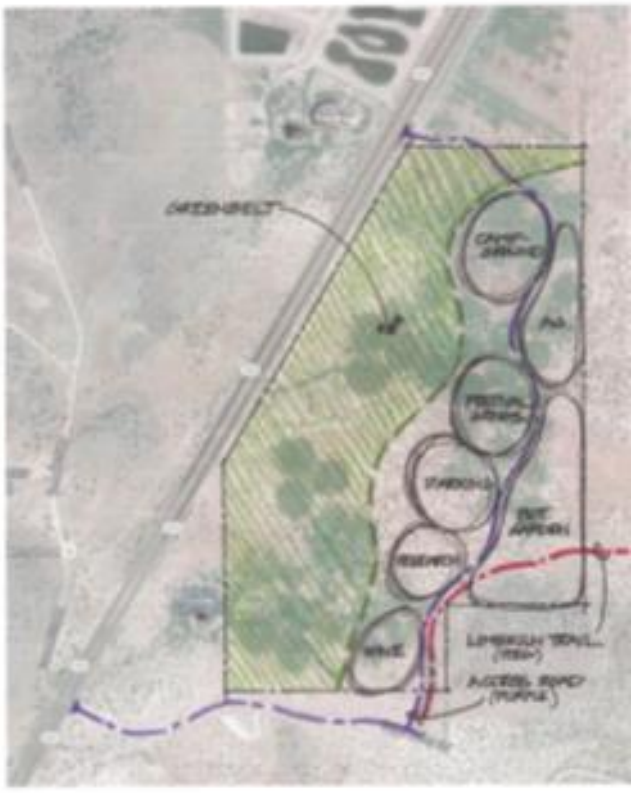
Community Expectations

- Consider only future uses that are environmentally sensitive, that retain an open space character, and that contribute to Sedona's environmental and economic sustainability.
- Future planning efforts will consider public feedback from the 2011 community survey for the *Parks and Recreation Master Plan* and the public responses to alternative planning themes presented in January 2013.

Figure ES -2

Dells Land Use Group

Concept attempts to maintain a natural/vegetative zone adjacent to highway to preserve scenic entrance to Sedona.



Concept Bubble Diagram

Figure ES-3

Dells Land Use Group

Site Statistics

Land Use	Area (Acres)
Native Greenbelt	80
Native Grass Seed Prod.	15
Vineyards	25
Winery & Demo Orchard/Perm	5
Research/Edu. Center	4
Staff Housing	1
Parking	15
Roadway	5
Amphitheater/Festival Grounds	10
Orchards	7
Ag Bldgs./Greenhouses	3
Bot. Gardens/ Interp. Trails	20
Campground	10
Total	200

Overall Concept Site Plan

The majority believes that whatever development occurs should embody certain concepts of sustainability and visual integration with the site. When taken to the next step in the area-specific Master Planning process, design guidelines should be written to address the following concepts.

Buildings:
Architectural design should meet the highest standards for "green" building
In general, buildings on the Dells site should be single-story

Energy Generation:
On-site generation of electricity should be explored as much as possible

Circulation:
Flow with the terrain
Minimize cut and fill requirements and any erosion impacts to the natural site drainage
Parking should use some form of permeable paving surface

Landscape:
Emphasize both native plants, and useful agricultural plants
Lighting should meet or exceed Sedona's dark-sky requirements

It is suggested that a project of such size and complexity ought to be thoroughly vetted by professional specialists/consultants in their respective areas of expertise. The city should be guided in the examination of the components of such a study by these professional resources.

A study conducted by a firm that is experienced in the development of comparable multi-functional projects should include examination and consideration of the following:

- Public opinion input on development vision and proposals
- Financial analysis of individual components and project as a whole
- Market analysis of individual components and project as a whole
- Organizational options related to ownership, operation, etc.
- Risks and cost benefit analysis of options
- Evaluation of modifications to proposed uses
- Environmental impacts and benefits

A minority of the group believes that "We need a vision that considers the unique, intrinsic value of land that is left unspoiled for the enjoyment and nurturing of people and wildlife." Two members of the group prepared a Dissenting Opinion citing several position papers developed over several years, took the position: "Because of the strong public statements that favor protecting this area, and because of the historic intent to preserve it, this land should not be developed." In support of this position statements from the Community Plan, the 2013 Sedona Park and Recreation Plan, the State Route 89A Corridor Management Plan, the 2006 Verde Valley Regional Land Use Plan, the 2012 Yavapai County Comprehensive Plan, and the Vision Statement for the Red Rock/89A Corridor/Dry Creek Area of Yavapai County 2014 are cited. In

addition, the minority expressed concerns that, among other issues, development may affect scenic views, wildlife corridors and birding habitats.

The majority and minority agreed that the report should include the Dissenting Opinion along with a Response to the Dissenting Opinion. The response maintained that while "the "Preservation Vision" for the Dells property described in the Dissenting Report is a valid option and should be included as an addendum to the final report, the Group disagrees that it represents a vision more in line with past planning efforts than the development vision proposed by the majority. The proposed land uses take into consideration the need for visual preservation of the highway corridor and for environmentally responsible development patterns for land use, buildings, and infrastructure. The Response goes on to address several claims made in the Dissenting Opinion.

This report is presented to the City Manager, since that office created the group. That being acknowledged the group recognizes that what is being presented will need to go through a vetting process. That process may result in changes. This report is presented to the City Manager by the DLG as a well-considered basis for developing plans for the Dells area.

Figure ES-1 Planning area

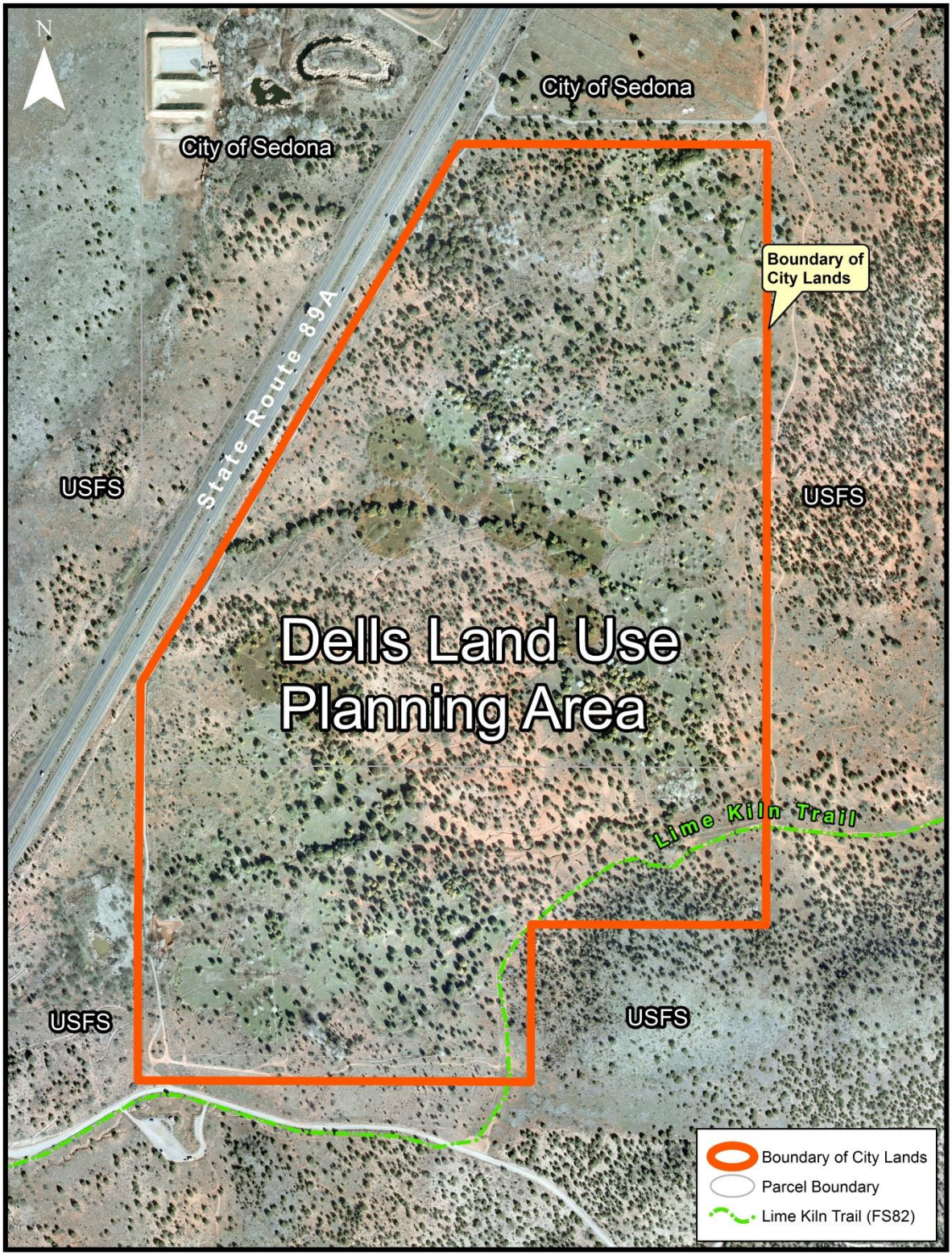


Table ES-4
Priority Ranking Survey Results

Rank	Use Concept	Average Scope (10 max)
1	Native Greenbelt	9.125
2	Roadway	8.750
3	Parking	8.250
4	Amphitheater/Festival Grounds	7.250
5	Orchards	6.500
6	Research/Education Center	6.500
7	Agricultural Bldgs/Greenhouses	6.375
8	Botanical Gardens/Internal Trails	6.250
9	Vineyards	5.375
10	Campgrounds	5.125
11	Native Grass Seed Production	5.125
12	Staff Housing	5.000
13	Winery &Demo Orchard	4.500

Introduction to Dells Land Use Group

As of February 26, 2014, the City Council approved an Effluent Management Plan. Implementation of the plan would result in approximately 200 acres of the Wastewater Reclamation Plant (WWRP) lands no longer being necessary for effluent management. The Community Plan, approved by the voters on March 11, 2014, identified the plant as Community Focus Area 13. Tim Ernster, who was City Manager at the time, appointed a Citizen Working Group to provide input to City staff as part of the concept development process. On July 24, 2014 the group began meeting.

The group adopted the name Dells Land Use Group, (DLG) based upon a previous designation of the area as the Dells. The following purpose statement was adopted: "*To make conceptual level recommendations to City staff of use concepts and uses for approximately 200 acres at the Wastewater Plant- mainly in Irrigation Area 4.*" The group operated by consensus and was facilitated by City Manager, Tim Ernster and Director of Wastewater, Charles Mosley. The group generally met twice a month.

Figure 1 shows the planning area the DLG was focused on. The scope of the DLG did not include investigating modification of treatment plant operations, financial planning, project management strategizing, project phasing, or detailed concept viability studies. City staff would be responsible for pursuing these and other aspects of the project implementation.

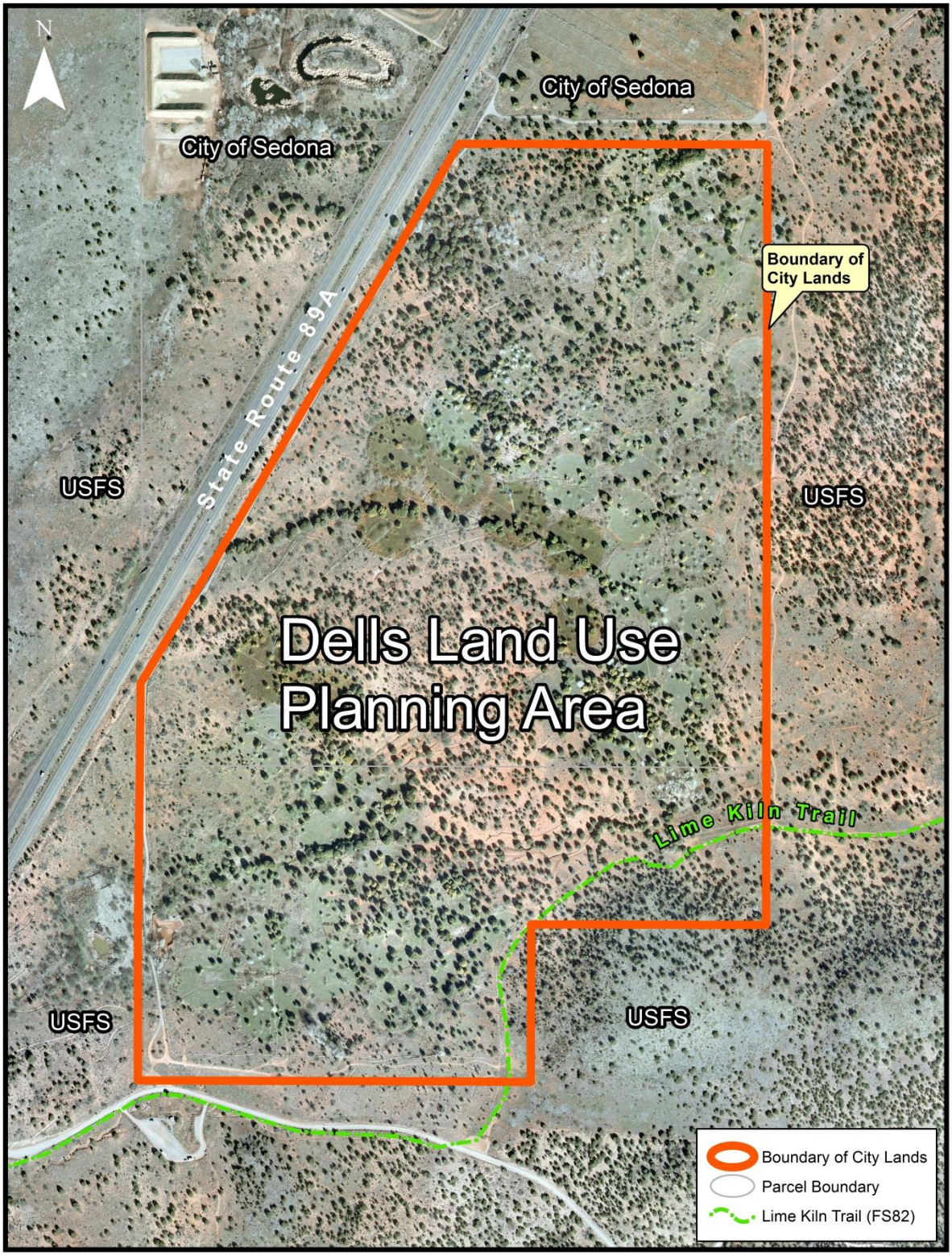
The members of the group are listed below:

1 Rob Adams	8 Maria Tonello
2 Paul Chevalier	9 Jennifer Wesselhoff
3 Mark DiNunzio	10 John Wesnitzer
4 Dena Greenwood	11 Tim Ernster[2]
5 Andrea Houchard	12 Justin Clifton
6 Max Licher	
7 Gerhard Maver	

[2] Tim Ernster was appointed a member of the Group upon his retirement in February 2015

The meetings of the group were frequently attended by the following staff members, City Manager, Tim Ernster; Director of Wastewater, Charles Mosley; Long Range Planner, Mike Raber; Associate Engineer, Roxanne Holland; Citizen Engagement Coordinator, Lauren Browne.

Figure 1 Planning area



Process

The work of the Dells Land Use Group proceeded through several phases to reach its goal of developing a conceptual land use plan for 200 acres at the Wastewater Reclamation Plant. The 200 acres is designated as Area 4 in the plant's site plan. Those phases were an orientation phase, an information gathering and criteria development phase, a concept development phase, and finally a report writing phase.

Agendas were prepared for each meeting. Many of the meetings were recorded and minutes prepared. Several of the speakers who spoke at the meetings provided handouts and slide presentations. A table of the meetings is included in this section.

Descriptions of the work phases

Orientation. The orientation phase included a number of basic familiarization activities. These included explaining that Citizen Engagement Groups are City Manager advisory groups. This meant that the group reported to the City Manager and their meetings were not public meetings as defined by the State's open meeting laws. Generally members of the public could attend a meeting, but had no right to speak at the meeting. The group could however allow a member of the public to speak. Group meetings would be facilitated by a City staff member and the group would work by consensus. There would be not appointed officers of the group. The orientation included a field trip to Area 4, review of the area maps, staff presentations on legal and regulatory issues, and a presentation by Carollo Engineers. The presentation by Carollo Engineers explained the Council approved Effluent Management Plan and how the installation of injection wells allows alternative uses of Area 4.

Criteria/Information Development. The criteria development work occurred concurrently with the information gathering phase. The goal of the criteria development phase was to narrow the list of various uses on the property and develop suggested criteria for evaluating uses. Development criteria, such as using paving blocks for parking areas were also developed. The criteria phase also included clarifying definitions for terms such as sustainability. Information gathering consisted in the group receiving many presentations on subjects of interest to the group. These included presentations on topics such as utilities, entertainment venues, agricultural uses, fishing lakes, land trades and water quality concerns.

Concept Development. The concept development phase goal was to develop a plan of uses for the property. This phase involved building the various uses identified in the Criteria

Development phase into a conceptual plan. The result was a plan which emphasizes open space in the western portion of Area 4. The eastern half contains various built uses. Doing this maintains the open space view along SR 89A, while the eastern half is an active economic generator.

Report. The final phase was the preparation of this report. The group divided into subgroups to write various sections of the report. These sections were sent to all members of the group for review. Final revisions to the reviewed section of the report were made by the subgroup responsible for the section. The report's executive summary was prepared by the staff facilitator.

Community Plan Summary as Relevant to Dell Land Use Proposals

The Sedona Community Plan was adopted in 2014. Citizens, businesses, city government and the tourism industry participated in the plan to develop a vision for Sedona's future, 2020 with an emphasis in guiding the city toward a positive, sustainable direction.

The six main components of the community plan include:

1. Commitment to environmental protection
2. Housing diversity
3. Community gathering places
4. Economic diversity
5. Reduced traffic
6. Access to Oak Creek

Of those six primary outcomes the vision clearly states that "Sedona is a community that nurtures connections between people, encourages healthy and active lifestyles and supports a diverse and prosperous economy, with priority given to the protection of the environment. "

The plan states that "Sedona residents have a great responsibility – to oversee and protect one of the most beautiful places on earth. As such, all of our community actions and decisions must be weighed against the preservation of the beauty of Sedona. "

The Citizens Steering Committee formulated three potential visions for Sedona's future. These visions focus on environment, tourism and community. Whereas all themes are important, the environment has the highest priority.

Continuing with this directive it states that "Sedona is known for practices that respect and protect the natural environment, and as the responsible caretaker of one of the world's greatest treasures" it will ensure that:

-Oak Creek will be a healthy riparian area with clean water
-The natural environment will be the dominant feature of the City
-Homes, businesses, parks and streets will be in harmony with the natural landscape.

In reviewing the six components of the community plan we have identified those specific components that are applicable regarding the Dell Land Use Proposal:

Component #1: **Commitment to Environmental Protection:**

- Protecting the environment which will be a high priority in all decision-making and fundamental to the City's prosperity.
- National Forest lands will be preserved, protected and respected.
- Residents and visitors will be educated on environmentally responsible practices.
- Volunteers will contribute to environmental restoration and education

Component #2: Community Connections:

- There will be people-oriented public gathering spaces throughout the City
- Parks, plazas, cafes, concert venues, festivals and markets will be dynamic places where people socialize.
- There will be diversity of people interacting with each other whether by age or background, resident or visitor.

Component #3: Economic Diversity:

- The City will have a stable and prosperous community.
- It will value quality business practices over quantity.
- Businesses will be innovative and creative.
- The long-term health and prosperity of people, resources and the economy will be consideration in all decisions.

The unique character of Sedona and surrounding environmental beauty creates a distinct image and identity. The community plan clearly states that maintaining this "Sense of Place" is an important factor in all development. The Community Plan emphasizes that the built environment will blend with the natural environment. And that Sedona will be known as a clean, green, and sustainable community. It will be a serene and beautiful place to visit and will maintain it's small town character. How it will achieve this is by continuing to limit building height, lighting, signs and colors. The built environment will integrate the natural topography and vegetation.

The plan states that "the preservation of our natural environment and scenic resources is paramount importance and is the community's greatest asset. Dark skies and expansive scenic vistas are highly valued. We want the natural environments to be well-integrated and the community's identity and character to be reflected in the built environment. A desire for a sense of community and 'small-town' character are recurring themes. We want our built environment to encourage uniqueness in architectural design so that typical franchise architecture is not found here, buildings are designed for the human scale, signs are understated and indigenous and historic materials are utilized".

The Dell Land Use area consisting of 200 acres is about five miles outside city limits is part of The Sedona Wastewater facility, and is part of the view shed along the Highway 89A corridor which is the southwest approach to Sedona. The Community plan states that "only uses that are environmentally sensitive, that retain open space character and that contribute to Sedona's environmental and economic stability will be considered. Future planning efforts will consider public feedback from the 2011 community survey for the Parks and Recreations Master Plan and the public responses to alternative planning themes presented in January 2013."

The Sedona Community Plan addresses Parks, Recreation and Open Space Policies: (only points that are relevant to the Dell Land Use are enumerated).

1. Provide and support community events, festivals and programs that offer a variety of opportunities for social interaction and contribute to a sense of community.

5. Support collaboration between agencies, organizations, and businesses on trails marketing, management, and maintenance in recognition of the values of trails to the community and the economy.

6. Support Forest Service policies that ensure National Forest land in and around Sedona is permanently protected.

9. Maintain the lowest density land uses next to the National Forest, supporting cluster development, and reserving open space in Community Focus Areas or Planned Areas.

10. Preserve natural open space, including areas with significant natural resource value, the riparian habitat of Oak Creek, and view sheds such as: ridgelines, scenic vistas, along highways, and gateways into the community.

11. Support the preservation of significant open space between Verde Valley communities through ongoing coordination with other jurisdictions and land trusts.

In the appendix, under Community Needs, the Plan references the defunct Cultural Park . It states that the "creation of an amphitheater and performing arts center on a smaller scale than the original cultural park would lessen traffic impacts and enhance elements of a small-town character".

Community Focus Area 13: Wastewater Treatment Plant

1:22,000
Note: Image is for illustration purposes only - actual boundaries and affected parcels will be determined through the future CFA planning process.

Attributes

- The 400-acre property is located four miles west of the Sedona city limits and is owned by the City.
- Site of the wastewater treatment facility for the City of Sedona.
- The Sedona Wetlands Preserve ponds provide for effluent evaporation and wildlife habitat with public access.
- This area is outside the City; however, future planning for the site will have a significant public involvement process.

Community Expectations

- Consider only future uses that are environmentally sensitive, that retain an open space character, and that contribute to Sedona's environmental and economic sustainability.
- Future planning efforts will consider public feedback from the 2011 community survey for the *Parks and Recreation Master Plan* and the public responses to alternative planning themes presented in January 2013.

The Dells Vision and Proposed Land Uses

Open Space

The western half of the 200 acres adjacent to the highway is designated as open space, composed of a greenbelt of preserved native vegetation in the wooded areas, with some rural agricultural plantings in several of the more open areas. The natural rise of the terrain to the east, coupled with the dense Juniper woodland on its slopes, will serve to screen the community uses and other agricultural infrastructure proposed on the eastern half of the site, and preserve the important view shed from the highway.

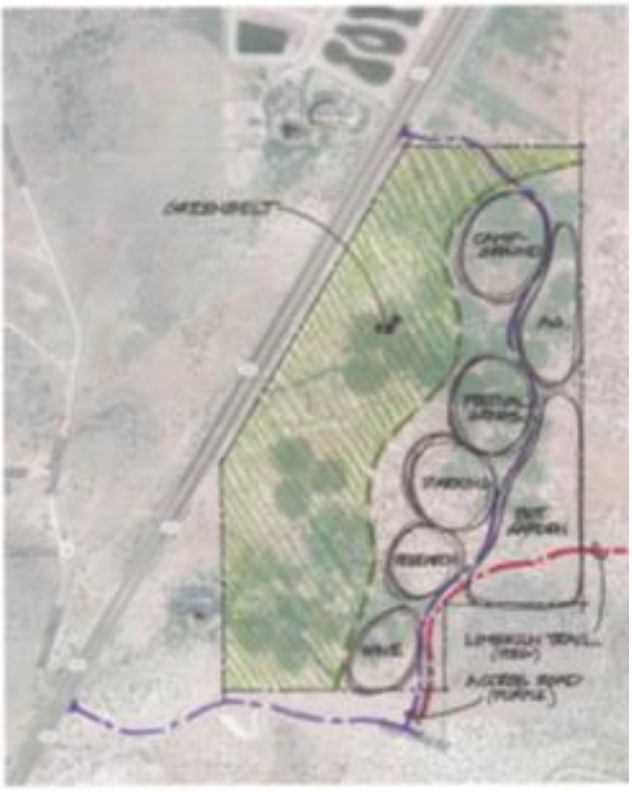
The current irrigation program, whose intent is to dispose of effluent by spray irrigation, will cease. Under this program the native Junipers are receiving too much water. Some of the native Junipers may recover from the stress of overwatering, but it is also possible that some dying trees may need to be removed and that replacement vegetation may need to be planted or encouraged to grow. This would be done to help maintain foreground screening relative to SR 89A.

It is also anticipated that with the cessation of over-watering, native grasses and shrubs will replace the irrigated weedy vegetation that currently dominates the area. This too may take active effort in order to control and remove some invasive species. Irrigation of the vineyards and other landscaping will be accomplished through more water-efficient drip technology. The visual character of this parcel should become more natural without the use of large scale spray irrigation. It will become a combination of the native Pinyon, Juniper Woodland and Desert Grassland biotic communities, with a complementary rural agricultural landscape. Glimpses of the eastside development infrastructure will be significantly shielded by the foreground vegetation.

Figure 3- Future Bubble Diagram

Dells Land Use Group

Concept attempts to maintain a natural/vegetative zone adjacent to highway to preserve scenic entrance to Sedona.



Concept Bubble Diagram

Figure 4- Concept Plan

Dells Land Use Group

Site Statistics

Land Use	Area (Acres)
Native Greenbelt	80
Native Grass Seed Prod.	15
Vineyards	25
Winery & Demo Orchard/Perm	5
Research/Edu. Center	4
Staff Housing	1
Parking	15
Roadway	5
Amphitheater/Festival Grounds	10
Orchards	7
Ag Bldgs./Greenhouses	3
Bot. Gardens/ Interp. Trails	20
Campground	10
Total	200

Overall Concept Site Plan

Eastside Development

The proposed development on the eastern side of The Dells contains the following land uses:

1. Amphitheater & Multi-purpose Fields
2. Botanical Garden & Horticultural/Restoration Institute
3. Research/Education Center
4. Vineyards, Winery & Tasting Room
5. Orchards & Agricultural Greenhouses
6. Campground
7. Staff housing

Using a 10-point scale the group ranked these various uses relative to their importance to the overall development concept. The various types of development are described below, and the rankings are listed in an appendix. Within the discussion of each proposed land use, infrastructure elements such as drives, parking, pedestrian pathways, and irrigation will also be briefly addressed. Concluding this discussion of proposed land uses will be a section describing the overall circulation and roadways concept, and one on proposed building development guidelines.

While some venues, such as the campgrounds, botanical gardens, research centers and agricultural components would be available on a daily basis, the land use group is not proposing that the Dells location is a viable alternative for daily community functions such as ball games and public parks that are better located closer to the community neighborhoods that they serve. This, however, would not preclude events that do not have suitable venues in town.

Amphitheater & Multi-purpose Fields

Overview

The highest ranked land use proposed on the 200 acres is a performing arts amphitheater. This amphitheater will fulfill the strong community desire for a large outdoor performing arts venue, similar to the one once provided by the original Cultural Park. However, this venue is conceived to be simpler in infrastructure, more like the former grassy field developed at the Verde Valley School. It should be simple to maintain, and easily expandable to accommodate more frequent crowds of 500-1500 people, all the way up to 5000 seats for the rare concert events that might need such a scale. Its location at the Dells will preclude any noise conflict with neighboring subdivisions, a problem that has plagued all previous venues within the Sedona city limits and in the Village of Oak Creek, and limited their economic viability.

Site Plan

The amphitheater is proposed to be tucked into the upper slopes of the central draw on the property, so that the audience has great views to the red rock formations due north. This amphitheater would be developed using a gentle grassy slope for the seating area, with the more level area located in the bottom of the draw for the stage. A low-profile proscenium behind the stage will hide backstage building and support infrastructure from the audience's view. Restroom and concession buildings would be low-key, and located opposite the stage at the top of the grassy slope, near the audience entrance to the amphitheater grounds. Some support infrastructure will be needed for sound systems and cover for the stage area such that the rain/sun cover and other equipment can be temporarily installed for only those performances that require them.

Two large multi-purpose fields are shown adjacent to the amphitheater in the most level area of that part of the site. These could be used as festival grounds for numerous other community and regional events. Examples might be: dog and other animal shows, arts festivals, harvest festivals, regional farmers' markets, fund raisers, regional sporting events, eco fairs, etc.

Parking for the amphitheater and multi-purpose fields is centrally located so that it will serve more than one development use. Parking for 500 cars will be provided on site. This should serve amphitheater events of up to 1500 persons. For those infrequent larger shows, the additional amphitheater patrons would be shuttled from remote parking locations, similar to what has been done for past large events in the Sedona area.

This parking would be integrated into the wooded terrain south of the amphitheater, where the existing Juniper forest will help to screen it from view. Some trees will be lost, but enough can be retained to both naturalize the parking area and serve as the required screening. In keeping with the concept of low impact development the Group suggested that paving be accomplished with material such as "Turf Block", whereby grass can be grown with irrigation water supplied by the treatment plant, such that the surface appears natural, and rainwater can percolate directly into the soil, minimizing runoff and drainage issues. The grassy amphitheater slope, and multi-purpose fields will also be irrigated with treated effluent from the plant.

Day to day traffic will use the main southern entrance/exit, but a secondary exit to the north is proposed that can be used for relief of exit traffic after a large event. This internal roadway connection will be described further in the section on circulation. It will also provide backstage and maintenance access, but would not be used by the general public on a daily basis. A system of pedestrian pathways and trails will connect the amphitheater site to both the Campground to the north, and to the Botanical Gardens, Winery, and Research Center to the south. The

amphitheater would be open to the general public when not being used for an event, and could provide a beautiful picnic site with fabulous views for patrons of the other uses.

History & Economics

The topic of an outdoor amphitheater has been identified as a "community cultural facility need" since the first Sedona Community Plan was adopted in 1991. In response to this community desire, the Community Land Use Map was amended in 1993 to initiate a forest service land trade for a "public/semipublic" use of approximately 44 acres located in West Sedona. Through widespread private and public support between 1995 and 2000, a plan was developed and funds were raised to open the initial phase of what was to be known as the Cultural Park.

The Cultural Park opened in 2000 with several components:

- An outdoor amphitheater (5530 seats)
- Festival grounds (2500 people capacity)
- Vehicular access and parking (925 car capacity)
- Related facilities and infrastructure

Due to an unwieldy board of directors and the lack of a sustainable financial plan, the park closed in 2003. Financial viability of the Cultural Park was also limited by restrictions placed on the number and timing of shows to accommodate the neighbors' concerns. Widespread support still exists in Sedona for an outdoor amphitheater as evidenced by the community expressions in subsequent Community Plan amendments.

Summary

The amphitheater and festival grounds represent the community heart of the proposed development at the Dells. They are the celebratory complement to the rest of the educational uses, and can help expose many more patrons to the ongoing efforts envisioned in the other components of the plan.

The other uses proposed for The Dells all demonstrate sustainability, and are related to agriculture and local food production, and the re-use of treated effluent. This combination of the arts with agriculture ties both threads of our community history together, and in a location that links us to the greater Verde Valley region as well.

Botanical Garden & Horticultural/Restoration Institute

Overview

Recognizing that there are local and regional goals to develop more sustainable ways of living that respect and enhance natural systems, the Red Rock Botanical Gardens and Verde Valley Horticultural and Restoration Institute (VVHRI) is a proposed nonprofit organization located at the Dells, whose mission would be threefold:

• Education: The Botanical Gardens would provide the public with information regarding the plant components of our local and regional ecosystems, as well as appropriate ecological landscaping, gardening, site planning, and building strategies for climates and soils in the Verde Valley. It would also encourage participation in local community gardens with demonstration gardens and orchards, setting a precedent for an expanded community garden network throughout the Verde Valley.

• Research: The Institute would further develop our knowledge of local ecosystem dynamics, including issues relating to endangered and sensitive species, restoration of damaged landscapes, and the influence of invasive exotics. In addition, research would focus on optimizing the design of human landscapes and gardens for utility, beauty, diversity, and conservation in this particular region.

• Propagation: The Institute would actively propagate local species/genotypes for use in public lands restoration projects, as well as work towards increasing the populations of endangered and sensitive species in the Verde Valley region. The demonstration gardens could also help generate extra seeds of locally adapted cultivars.

Site Plan

The Gardens would be located in the southeast corner of the Dells property, where the best natural landscapes are currently preserved, and where the Limekiln Trail easement can co-exist with an interpretive trail system. In addition to an extensive native plant garden and this interpretive trail system, the Red Rock Botanical Gardens would also have a series of other demonstration gardens featuring herbs, medicinal plants, and vegetable varieties suitable for our climate and soils, and orchard strategies appropriate for the region. There exist a variety of ecosystem-based agricultural systems utilizing a polyculture of plants that could be adapted to our local region in a series of experimental garden plots, with the goal being to develop new indigenous patterns for Verde Valley landscape development.

The Institute's interpretive center and other associated buildings would be integrated with these gardens and be models of beautiful and highly functional solar design that generate energy while recycling waste and water. Thus a new ecological aesthetic will be reinforced by all elements of the Gardens site. This would help to bring the early agricultural history of the Verde Valley full circle into the twenty-first century, and demonstrate a pattern for stewardship in our region that should be sustainable over the next hundred years. A garden café could be located in a residential scaled eco-structure in the gardens separate from the main Visitor Center, and would also serve as a model for the design of personal homes integrated with both natural and functional

landscapes.

Partnerships and Funding

The Red Rock Botanical Gardens and VVHRI would most likely be created as a non-profit organization, and would achieve financial sustainability through a combination of membership dues, visitor fees, fundraising, grants, and through partnerships with land management agencies. The organization would seek to establish cooperative partnerships with other botanical gardens in Arizona, such as The Arboretum at Flagstaff, the Desert Botanical Garden in Phoenix, and The Arizona Sonora Desert Museum. These existing organizations all have related missions, but their regional focus is for the most part to the north or south of us. Having a local institution with a base in the Sedona area will provide a much stronger focus to research and education appropriate for the Verde Valley and central Arizona than these other organizations can provide.

In addition, there is a growing need for Public Land managers to deal with ever increasing impacts to the natural resources in the Verde Valley. Greenhouses and production fields at the Institute will serve to generate both plant material and seed for restoration projects. Partnerships might be established with private local growers and landscapers, where expertise could be shared and the plants generated for projects requiring a larger volume than the Institute itself may be able to provide. Plants could also be started and grown initially at the Institute, and then sold for incorporation into local and regional landscape/garden projects. The natural grasslands shown as part of the western greenbelt preserve might be managed by the Institute for native grass seed production, which could then be used by the USFS or other agencies needing sources for locally grown genotypes.

Summary

The location of the Red Rock Botanical Gardens and VVHRI will be critical to the success of this effort. The site should ideally have both intact native habitat, as well as a some arable land with water availability or water rights or associated. It should be easily accessible. A location in the Sedona/Red Rocks region will help greatly in terms of public visibility and draw, and could significantly help the economic viability of the organization. The Sedona City property at the Dells fits these criteria, and the use of treated effluent for irrigation at this site would also demonstrate sustainability. It is potentially served by public transportation in the future-- an important factor in minimizing the environmental impacts of increased visitation that the Gardens and Institute would generate. This project would end up being a regional resource, and as such, is ideally located along one of the major highways, in such a way to serve as a key attraction between the scenic and recreational draw of Sedona, and the emerging agricultural/viticulture industry of the Verde Valley.

Vineyards, Winery, & Tasting Room

Overview

The budding winery and viticulture industry that has emerged in the Verde Valley during the last fifteen years is in alignment with a majority of the guideline criteria that has been established for uses at the Dells Land Area. The inclusion of a vineyard and tasting room compliments the overarching theme of the Wetlands development. It creates a sustainable land use that respects open space, helps to fulfill the strategy of finding alternative uses of effluent and provides opportunities for revenue generation and job creation. Finally, this component uniquely positions Sedona as a partner in the viticulture industry in Arizona.

Site Plan

In the Overall Concept Site Plan that has been prepared by the Dells Land Use Group, approximately 25 acres are proposed to be used for vineyards and 5 acres for a winery/tasting room. This component of the plan is located on the southeast portion of the Dells property. The vineyards are proposed to be located in the southwestern section of the property, in a gentle bowl with less dense existing vegetation than on the upland portions. The winery and tasting room are proposed to be located at the top of the vineyards, just inside the main southern entrance to the Wetlands development property. This building could be beamed into the north-facing slope of a gentle hill, where it can demonstrate earth-integrated sustainable design and provide great views of the red rock formations to the north from a tasting terrace. This location near the main entrance will facilitate easy in and out traffic. If visitors are interested in exploring the other amenities on the site, there will be trail connections through a demonstration orchard and the native pinion/juniper greenbelt to the proposed research center, amphitheater and festival grounds site. Another proposed connection across the entrance road could take visitors to the Limekiln trail.

Effluent Use, Open Space Preservation, and Job Creation

The wine industry is playing an increasingly important role in the preservation of agricultural land, open space and local crop production. Approximately 100 acres of land in the Verde Valley is in current grape production that was previously unused or abandoned for agricultural use. Each acre of land requires 12 – 15 thousand gallons of water per week to irrigate during the growing season, which is March through October. Additionally, the Verde Valley wineries and vineyards are providing both income opportunities and new job creation. In a report prepared by the Yavapai County Cooperative Extension in 2011, Verde Valley wineries, vineyards and tasting rooms employed 124 people.

Revenue Generation

The real strength of this niche market is the value-added tourism experience. A survey was conducted in 2011 by the W.A. Franke College of Business at Northern Arizona University to determine the demographics and economic impact of the Arizona Wine industry. The survey found that the average age of visitors to wineries was 46 years old with an average annual income of $88,149. These statistics are comparable with the demographics that the Sedona Chamber of Commerce targets in its marketing campaigns. The survey also shows that 70.4% of the people that visit wineries make a purchase averaging $70, which resulted in an estimated $22.7 million in direct expenditures in our state. A majority of winery visitors in the Verde Valley (42.6%) find lodging in Sedona. Only 10.9% stay in Cottonwood. The balance of the visitors were "day trippers".

Summary

A primary focus of the Dells Land Use Group was to follow the guidelines that were expressed in the 2014 Sedona Community Plan Update, while creating multiple land uses that were synergistic and visionary in scope. The inclusion of a vineyard/tasting room not only "fits" in the overarching theme of the Dells Land Use Plan, but it also sets the stage for new revenue generation possibilities in the Sedona/Verde Valley area. According to a 2006 U.S. Travel Industry Association study, over 17% of American leisure travelers have engaged in some kind of culinary or wine-related activity while traveling. This equates to over 27 million travelers nation-wide. Although Sedona benefits from the budding wine industry in the Verde Valley, we have not participated in the growth of that industry from a grass roots level. The recent discussions that have taken place in our community regarding a potential culinary institute, combined with the high quality restaurants in our city and the possible development of a functioning vineyard present exciting opportunities for taking a leading role in creating a culinary/wine industry in the Sedona/Verde Valley area.

Research/Education Center

Overview

There are some concerns about the use of water with constituents of emerging concern (CECs) on food products; one of the major aims here is to research how various agricultural crops are affected by re-used water. Vineyards and orchards are the least likely to have fruit affected by CECs. Smaller scale intensive uses like hydroponics could be used to research additional levels of treatment to further remove these constituents. While such treatment might not be cost effective for all the water the City needs to dispose of, it may make sense for the limited amount needed for such operations. Other agricultural products that would not have these concerns would be nursery starts and landscaping plants, or seed production for ecological restoration on public lands.

Ongoing research could also focus on the long-term viability of different cultivars and food species, with the aim of developing a database of the best plants to recommend for our particular climate and elevation. This work would be in collaboration with the Botanical Garden, whereby the Research Center could provide more technical facilities, and networked connections with universities and research centers in other parts of the country/world.

The research center at the Dells would be a joint effort between City of Sedona and one or more universities. Some housing would be made available at the site to house visiting researchers. It is likely that some researches would find temporary housing/lodging in Sedona thereby contributing to the local economy.

Classrooms included within the research center would be utilized for education of Sedona residents and students as well as many visitors. They may become auxiliary campuses of the research universities to teach classes on subjects such as sustainability, urban gardening, greenhouse growing, hydroponics, and aquaponics.

Site Plan

The Research Center site was selected to be near the Botanical Garden Visitor Center to showcase the reuse of treated wastewater and plant viability research. The location has been set away from view from traffic approaching from Cottonwood to maintain the natural view shed. The site is located between the central parking area and the Winery/Tasting Room, and is also accessible from the Campground via nature trails through the western greenbelt of the Dells property.

Community Plan Goals/Benefits

The research center would contribute to several Economic Development and Community goals identified in the Sedona Community Plan. It would: assist in developing water conservation and energy efficiency measures and sustainable practices; support partnerships between schools, City, non-profits and business that invest in and involve youth in community and cultural education, projects and programs; and attract and retain creative professionals, business, and educational institutions that contribute to the arts, cultural, and economic vitality of the community.

Summary

As the world population expands it is imperative that we make the best use of the resources we have at hand. A research center located at the Dells would assist in realizing that goal.

Orchards & Agricultural Greenhouses

Overview

Agriculture has a long history in the Verde Valley and Sedona area dating back over two thousand years to the Sinagua people. More recently, the Homestead Act of 1862 offered farmers the opportunity to own agricultural land at affordable prices and brought early settlers to the Sedona area. Sedona's climate, rich soil and availability of water for irrigation was found to be ideal for growing food crops, particularly vegetables and fruit. The warm days and cool nights are ideal for their success. Throughout the history of agricultural pursuits in the area water delivery to plants was provided through the use of canals and ditches, diverting water from the Verde River and its tributaries including Oak Creek.

One of the goals identified in the Sedona Community Plan is "Preserve and celebrate the community's history". Given the long history of agriculture in the area and Sedona's desire to preserve and celebrate its history it seems only logical that an agricultural component be included in the development of the Dells land.

The land is beyond the reach of early canals diverting water from the Verde River and Oak Creek; however, a modern conveyance delivers Sedona's wastewater to the treatment plant adjacent to the site. Reclaimed water from the treatment plant offers a solution to the need for water for irrigation and is practically free for agricultural use when compared to alternative forms of disposal.

One of the Environment Policies outlined in the Sedona Community Plan is "Investigate and implement appropriate methods to reuse treated wastewater and to recharge groundwater". Irrigation for the production of food would seem to be an appropriate method of reuse.

According to an EPA report **Water Recycling and Reuse: The Environmental Benefits** "Recycled water has been used for a number of years to irrigate vineyards at California wineries, and this use is growing. Recently, Gallo Wineries and the City of Santa Rosa completed facilities for the irrigation of 350 acres of vineyards with recycled water from the Santa Rosa Sub regional Water Reclamation System."

According to a Bluefield Research report, **Drought Driving Greater Reliance on Wastewater Reuse in California,** Arizona ranks fourth in the nation behind Florida, California and Texas for volume of wastewater reused annually. According to the report, Arizona reuses about 197 million gallons per day or 9% of the 8.3 million cubic meters (2.2 billion gallons) reused nationally per day.

Agricultural uses would include orchards, vineyards and hydroponic systems for growing produce and/or flowers. A more in depth discussion of vineyards is found in another section of this report.

Vegetable farming has evolved over the past few years from local truck gardens to scientifically based, climate and pest controlled, indoor growing systems such as greenhouses and artificially lit growing chambers using some variation of the rapidly growing hydroculture techniques such as hydroponics and aquaponics. Vertical growing techniques, pest control, protection of plants from birds and animals, and climate control can increase the crop yield for a given area and enable year around harvesting enabling a reliable, constant source of produce for local users.

Site Plan

Locations of the Orchards and Greenhouses on the site have been strategically selected to complement other uses on the site. The orchards have been placed to help screen the campground from the view of amphitheater patrons without distracting from the view of the distant red rocks. The Agriculture Building and Production Greenhouses are located on a gentle north slope, just over a low ridge from the orchards, and thus out of view from the Amphitheater. Employee access would be from the north entrance of the property.

Community Goals/Benefits

Orchards would embrace Sedona's history. Vineyards would embrace current agricultural priorities in the Verde Valley. Both would aid in the achievement of several of the Environment, Economic Development, and Community Goals set forth in the Sedona Community Plan by: reusing treated wastewater for irrigation; providing jobs; recruiting new businesses that diversify Sedona's economic base; maintaining lowest density uses adjacent to National Forest; providing a sustainable food supply for the community; creating increased opportunities for social interactions; and preserving and celebrating the community's history.

Summary

Given the diverse range of uses planned for the Dells property any one use would likely attract visitors who would stay to experience the other uses

Greenhouses and orchards on the site would fulfill several of the Sedona Community Plan Goals as well as become a model to showcase the benefits of treated wastewater reuse and new growing techniques to thousands of visitors each year. These uses proposed for this portion of The Dells each demonstrate sustainability, and are related to agriculture and local food production, and the re-use of treated effluent.

Campground

Overview

One of the land uses proposed by the Dells Land Use Group is a campground consisting of approximately 30-40 campsites, nestled into the natural landscape at the north end of the planning area. It is envisioned that these campsites could be used for tent camping as well as for RV Campers. Given the popularity of camping, the unique land uses proposed for this site, and the shortage of campsites in the Verde Valley and Oak Creek Canyon, there is a very high likelihood that this facility would be an immediate success.

Site Plan

The campground would be situated on a gentle north-facing slope, over a low rise so that it would not be visible from the Amphitheater site. The area is primarily vegetated with native Juniper trees, most of which would be retained as both amenities and screening of the campsites from the highway. Additional screening trees could be planted, using the available effluent for sustained growth. Rest room facilities are situated centrally to both ends of the primary camping loops. These could use the treatment plant for disposal of the wastes, avoiding the problems with pit toilet odors prevalent at many campgrounds. The campground abuts the native greenbelt preserve, through which a trail system connects campers to the other Dells facilities. In addition, a convenient underpass will allow campers to access the wetlands without having to cross the highway.

Community goals and benefits

The general development concept for the Dells land Use Plan is to consider only future uses that are environmentally sensitive, and that retain an open space character. The proposed intent of the Dells Land Use Group is that the development of the property be performed in a manner that minimizes re-grading of the site, and uses low impact development concepts for roads, parking area, and other infrastructure components. The development of a well-planned campground either directly or indirectly meets all of the desired goals and benefits identified by the Dells Land Use Group.

According to the 2014 American Camper Report, camping has become an immensely popular activity for all ages, especially in the Mountain States. The report states that more than 40 million Americans went camping in 2013 for a total of 597.7 million days. The camping participation rate was 14 percent of the American population, which was essentially the same as 2012. The study further showed that the Mountain Region had the highest camping participation rate at 21 percent. The average camper went on 5.4 camping trips in 2013.

The Dells Campground is proposed to be an intergenerational facility that would offer educational and recreational opportunities for all ages, and that integrate with the other proposed land uses. Camping has become a popular and economical activity, especially during the last seven to eight years during the recession. It is not uncommon to see full campgrounds around Arizona with a mix of families that are tent camping and baby boomers that are enjoying the outdoors in very expensive and sometimes luxurious RV vehicles. Combined with the unique educational, research and recreational opportunities offered from the other proposed land uses, this campground facility would provide a unique opportunity to campers unlike any other camping facility in the area.

The success of the Sedona Osher Lifelong Learning Institute (OLLI) is a testament to the desire of the boomer generation for lifelong learning opportunities and skill development. The boomer generation seems to thrive on entertainment and learning new things. The Dells Land use Plan Concept offers a wide variety of new and unique learning experiences for baby boomers as well as young families and school students. These unique learning opportunities would set this camping experience apart from any other campgrounds in the region. The proposed facility would not only cater to the baby boomers but to other younger generations, families and students. Family tent camping has seen a significant increase, and younger families are buying tents and camping equipment that is much more sophisticated than previous generations. It has become a very economical means for younger families to take vacations at a much lower cost than other alternatives.

It is envisioned that the campground would serve as an educational facility for students of all ages from the region. Classes and workshops could be offered on a variety of topics such as astronomy, botany, zoology, basic outdoor survival skills, wine making, and Plein Air painting. Also, the existence of a major wetlands preserve that is already attracting birding enthusiasts from around the country is a use that will certainly add to the popularity of this site.

It is proposed that this campground utilize management practices that demonstrate protection of ecosystems and are consistent with practices that boost increased populations of protected or endangered indigenous wildlife. This would be accomplished through monitored, protected grounds (hunting is banned), managed acreage for prevention of wildfires, and attracting specialists including leading scientists who would contribute to the ongoing study and knowledge of the area.

Financial sustainability

It is not unreasonable to expect an average annual occupancy rate of 80% for this facility, based on occupancy rates of other campgrounds in the region. If one assumes and average daily rate of $30.00 and an annual 80% occupancy rate, this facility could generate up to $350,000 annually to cover operating costs. Forest service campgrounds charge up to $40.00 per night for campsites with RV hookups. Although initial infrastructure and development costs are unknown

at this time, additional research and analysis needs to be conducted to develop a realistic financial plan for operating and maintaining the facility.

Summary

The development and operation of a camping facility could be a very popular attraction for the Dells Development. It can be a very compatible use for all of the other land uses currently being studied for the 200-acre site. However, more detailed research needs to be conducted to develop a solid business plan that can assure financial sustainability and be developed in such a manner that it serves as a compliment to the overall success of the site.

Staff Housing

The development concept proposed for the Dells includes a small cluster of residential buildings that could be used for staff housing, and for short to extended stays for visiting researchers and teachers. These homes are located adjacent to the Research Center facility, and are central to both parking and vehicular as well as pedestrian circulation.

This housing cluster can help demonstrate sustainability in multiple ways. The buildings themselves will be small scale, reflecting the general trend to downsize for energy and resource conservation, and well as lifestyle simplification. They will be designed with solar orientation, and use clean materials and efficient systems. They will share common space and resources.

Having some staff as permanent residents on site could help with safety and security, and should increase the institutional awareness of how the whole development is functioning from a sustainable perspective. Integrating some housing into a mixed-use development brings greater life to the place, and helps staff workers economically with affordable housing and minimizing commute time and costs. In addition, offering a place to stay on site would be an incentive for universities to send researchers and teachers to work at the Center.

Roadways and Circulation Concept

The concept plan proposes two access points from SR 89A into the property. The primary access for the main parking area and most venues, except the campground and agricultural greenhouses, would be from the south via Angel Valley Road (Forest Service Road 89B). This entrance road would parallel the Limekiln Trail alignment initially, just enough to the west to preserve the character of the historic pathway. Just past the Research Center it would veer away to the north, and from there a loop through the main parking area would take most visitors out back the way

they came. However, a through road would be constructed to the north that would provide support access to the backstage area, and could be opened and used as a second exit to the highway for crowds getting out of larger events at the amphitheater or multi-purpose fields. During normal times this roadway would be bollarded to keep daily traffic from circulating past the amphitheater site and community fields.

The access to the campground would utilize the current turn off of SR 89A to the Plant Administration building. A service road parallel to and on the west side of SR 89A would be used as the access to the campground via the underpass that currently exists at the northern boundary of the 200 acre parcel. On the east side of the underpass, a direct egress to the northbound lanes is proposed from the campground and as a secondary egress from the amphitheater for large events.

The primary road alignment curves through the landscape, avoiding long straight lines and contouring with the topography. It forms a boundary between the various land uses, and avoids bisecting uses as much as possible that want good pedestrian connections. A strong network of pedestrian and bicycle paths is also envisioned throughout the site, so that visitors can move from one facility to another without having to move their cars. This is especially the case for those staying at the campground; they will be able to access all the other site features, including the wetlands on the other side of the highway, via a beautiful system of greenbelt preserve trails, as well as those in the Botanical Gardens.

A small portion of the historic Limekiln Trail cuts through the southeast corner of the property (on its way from Red Rock State Park to Dead Horse Ranch State Park), along the northern base of the large hill that forms the most significant landmark on the parcel. In this concept, it is preserved as a general public access where it crosses a portion of the Botanical Garden grounds. It will only be crossed by other hiking and interpretive trails, which should be compatible with the desired character that the USFS would like to see maintained.

General Design and Development Guidelines

In keeping with the general direction given in the Sedona Community Plan for the Dells, the recommended development described in this vision should embody the concepts of sustainability and visual integration with the site. When taken to the next step in the area-specific Master Planning process, design guidelines should be written to address the following concepts.

Buildings

Architectural design should meet the highest standards for "green" building, utilizing a combination of both passive and active solar strategies, geothermal heat pump systems, and the highest efficiency equipment for the supplemental heating and cooling required.

Buildings should also be insulated to the greatest reasonable degree possible, using the least toxic products with the least environmental footprint in their manufacture. In general, all building materials should have minimal or no toxicity. Lighting and plumbing systems should use the highest efficient products with a reasonable long-term cost.

In general, buildings on the Dells site should be single-story, unless there are specific needs and opportunities to get an additional level below the main structure without elevating it further than it would have been to begin with. Where possible, buildings could be bermed into the gentle hillsides where they are located, and in some cases, could have earth-sheltered roofs to more completely integrate then into the landscape. Other buildings may have "green" living roofs, which would help with insulation and visual integration. The vision concept shows organic shapes to most of the structures, in keeping with the concept of natural building mirroring nature, rather than a high-tech, rectilinear contrast with nature. High tech systems should be used where appropriate, but the visual aesthetic should be one that expresses natural materials, much as most of our regional National Park and Monument architecture has. In particular, the use of native stone can be a common theme tying the Dells development to our historic past, as well as some of our other significant more current community buildings.

Energy Generation

On-site generation of electricity should be explored as much as possible, with the understanding that it must be balanced with the need for visual shielding from the highway corridor and the key on-site vistas (amphitheater, tasting room, botanical garden trails and visitor center). In addition to photovoltaics, co-generation of electricity with waste transformation or agricultural composting/recycling could be explored.

Circulation Components

As mentioned earlier, the roadway layout has been conceived to flow with the terrain, and minimize cut and fill requirements and any erosion impacts to the natural site drainage. Parking areas should use some form of permeable paving surface, and those that utilize green grass or other plants for both visual integration and water absorption should have high priority due to the unique opportunity that we have in an essentially unlimited amount of reclaimed wastewater. Parking should be integrated into areas with at least moderately dense trees for visual screening, rather than in the open meadow areas that exist on site.

The ultimate circulation layout should fully reflect a future where all portions of the Dells could be served by shuttle buses from Sedona and/or the other Verde Valley communities. Agreements with the USFS could be pursued for closer-by overflow parking areas for the infrequent larger events that would exceed the on-site parking capacity. On-site circulation should be a combination of pedestrian and bike paths, with provision for small electric vehicles for those with physical disabilities or limited stamina.

Landscape

Landscape design should emphasize both native plants, and useful agricultural plants, with an emphasis on setting an example for other new development in the whole region. Much as the Botanical Gardens will do specifically on their portion of the site, the whole development should be an example of multiple strategies for creating beautiful landscapes that serve as many different functions as possible (food, medicine, wildlife habitat, inspiration, repository of botanical diversity, etc.)

Landscape and circulation lighting should meet or exceed Sedona's dark-sky requirements, yet should be also be sufficient for safety. Landscape lighting can be both beautiful and enchanting, and it should serve the purpose of adding to the attractiveness and wonder that one will experience on the property, rather than being merely utilitarian.

Proceeding Forward

Overview

The Dells Land Use Group proposes that there is potential for significant economic, cultural, environmental, educational and regional benefits available to the citizens of Sedona and the Verde Valley from the proposed development of the studied area, and therefore warrants a deeper study of the possibilities and the impacts.

If after review, the city manager supports moving forward with this project, the following steps are offered for consideration as a manner of proceeding.

It is suggested that a project of such size and complexity ought to be thoroughly vetted by professional specialists/consultants in their respective areas of expertise. The city should be guided in the examination of the components of such a study by these professional resources..

It is recommended that a study be conducted by a firm that is experienced in the development of comparable multi-functional projects; and should include examination and consideration of the following:

- Public opinion input on development vision and proposals
- Financial analysis of individual components and project as a whole
- Market analysis of individual components and project as a whole
- Organizational options related to ownership, operation, etc.
- Risks and cost benefit analysis of options
- Evaluation of modifications to proposed uses
- Environmental impacts and benefits

The feasibility study is explored in somewhat more detail below.

In addition to the professional analysis and recommendations, staff may develop a broader plan for how to manage processes for the entire project.

This project is envisioned as requiring a collaboration between the city and multiple entities, profit and non-profit, who possess expertise, experience and financial capacity to develop and successfully manage such an enterprise. Removed sentence here regarding city's primary role as land owner…since we reference this analysis below

Feasibility study and financial analysis

I. City Manager's Office Contracts with a Master Planner. The Planner will lead an in-depth evaluation of the project development based on, but not limited to the observations, suggestions and recommendations of this study and report.

A. A Master Plan should consider an analysis/feasibility study, environmental sensitivity and financial analysis (including pro forma) for concepts including but not limited to:

1. Entertainment venue: Amphitheater, fields, parks
2. Agriculture: hydroponics, farming, greenhouse, vineyards, orchards, etc.
3. Research & Education Center: e.g. a Center for Innovation, a Center for Sustainability
4. Camping facility
5. Recreational and service venues: trails, food service, farm to table, wine tasting, gift shop, botanical gardens

B. Analysis/feasibility of individual components/concepts and how they work individually and/or as a whole

C. Evaluate options for City's involvement/responsibilities to include but not limited to pros and cons, financial analysis, and risk to the city of Sedona.
1. The city is landowner and leases the land to an approved developer
2. The city is an active partner/collaborator (functional and/or financial)
3. The city is an active developer and operator

D. Evaluate community benefits and synergy with the current community plan (cultural, residential, financial)

E. Evaluate the proportion of open space to development
1. 50% untouched
2. Proposed Agriculture = 30%

F. Evaluate effluent usage for the various components of the land use plan.

G. Evaluate the City's potential resource needs / staffing implications of proposed development, public facilitates and infrastructure.

II. Outstanding questions and overall concerns to be vetted by professionals:

A. What are the overall economic impacts?
B. What are the overall environmental impacts?
C. How do we organize to manage the project?
D. How do we fund a master plan?
E. What is the timing of a master plan implementation? Not budgeted in FY16
F. What is the timing of availability of land for development?
G. Can we use the effluent and therefore achieve cost savings on injection wells?
H. Is annexation to the city feasible and significantly beneficial?
I. Will development generate sprawl?
J. What are requirements and impacts on current road infrastructure?
K. What are overall qualitative and quantitative community benefits?
L. What are overall qualitative and quantitative regional benefits?

1. Multi-purpose fields for County and State events
2. Leasing the amphitheater
3. Destination for travelers to Verde Valley

III. **Agencies/Entities to be consulted:**

A. Yavapai county
B. United States Forest Service
C. APS
D. Educational entities (Universities, Yavapai College, Innovative Creators)
E. Neighboring cities/towns
F. ADOT
G. Yavapai Apache Nation

APPENDICES

Appendix 1

Dissenting Opinion - Dells Preservation Vision

1. Development at Dells Is Inconsistent with Citizen Poll Preferences and Public Planning Documents
   a. 2013 Sedona Parks and Recreation Master Plan
   b. 2005 State Route 89A Corridor Management Plan
   c. 2006 Verde Valley Regional Land Use Plan
   d. 2012 Yavapai County Comprehensive Plan
   e. 2014 Sedona Community Plan
   f. 2014 Vision Statement for the Red Rock/89A Corridor/Dry Creek Area of Yavapai County

2. Preserve the Historical Intent to Protect and Preserve the Area

3. Preserve Existing Views and Greenway
   a. For residents
   b. For visitors
   c. For our heritage

4. Preserve Existing Wildlife Corridors

5. Allow Vegetation to Return to a Natural State

6. Drawbacks of Development Proposal

7. Exercise Extreme Caution Using Water with Constituents of Emerging Concern (CECs) for Agricultural Uses

8. This Decision is an Expression of our Values that will be Visible to Residents and Visitors for Years to Come

Overview

Developing land at Dells (specifically in the way proposed by the authors of the Dells Development Plan conflicts with the goals and priorities of several public statements and community organizations, is known to be inconsistent with what the Sedona community desires (according to the Parks and Recreation citizen survey), and does not recognize the Community Plan recommendations to reduce vehicular traffic and create pedestrian-friendly community gathering places. In addition to these obvious conflicts (and perhaps more importantly) the development of the existing greenway undermines the historic intent to preserve this land as part of U.S. Forest Service lands. While the lands in question are no longer owned by the Forest Service, this was not because the Forest Service thought it was appropriate to use the location to develop campgrounds, an amphitheater and vineyards. Sedona acquired the lands because of its inability to dispose of its wastewater effluent. As alternative means of disposal for the effluent have emerged (and continue to be explored), these lands are no longer needed for the exigency that fostered their acquisition. A question to consider is whether the U.S. Forest Service would have traded these lands, in the midst of an uninterrupted greenway, if they thought the lands would be used to develop vineyards (that threaten avian habitat and health) or build a large-scale amphitheater for musical concerts (that would create noise pollution) and interrupt the silence and continuous vista of an otherwise undeveloped space.

Because of the strong public statements that favor protecting this area, and because of the historic intent to preserve it, this land should not be developed. If developed at all, it should be consistent with the citizens' desires expressed in the 2013 public survey and report of Sedona Parks and Recreation. First of all, only half of Sedona's citizens who responded to the poll were in favor of development. Of those who favored development, it was not of the type or complexity recommended by the current proposal. Sedona residents preferred wildlife viewing areas first (83%) and hiking trails second (64%). The recommendation to develop an amphitheater shows a disregard for the majority of citizens' preference (who responded to the poll), as only 28% said they would support such a structure in the Dells area.

The Dells Development Plan is ambitious, and includes numerous and mixed uses. It would require a major disturbance and alteration of the land area in question. In addition to this environmental and aesthetic disruption, this project would cost the city millions of dollars in initial road and utility infrastructure, actual project construction, and long-term maintenance of the proposed uses. The initial proposed consulting fees could easily reach into the millions as well. The Sedona Community Plan clearly indicates support for carefully examining potential pedestrian nodes and community gathering places within the city limits. The proposed development would increase vehicular traffic and would not be pedestrian friendly from within Sedona city limits.

1. Development of Dells Is Inconsistent with Citizen Poll Preferences and Public Planning Documents

Sedona Citizen Poll Preferences 2013

The Sedona Parks and Recreation Master Plan of 2013 includes results from a citizen survey about developing the Dells area for recreational purposes. On the question of developing the land for *recreation* at Dells, residents were divided 50/50. "*Respondents were split as to whether or not Sedona should develop the Wastewater Treatment Plant site for recreation. Among those who felt the site should be developed, wildlife viewing areas and trails were by far the most preferred uses*." Only half of people wanted any development at all, even if that development was only for recreation. *The question of whether the area should be developed for business or other uses was not considered.* Of those who did favor development for recreation, the preferred uses were as follows:

80% Wildlife viewing areas

64% Trails

28% Outdoor performing events venue

17% sports fields

3% preserve as open space[3]

3% Golf Course[4]

Since half of Sedona's residents who responded to the poll wanted no development (and the half that did want development strongly favored wildlife viewing areas and trails) it is likely that the proposed amphitheater, camping, and other enterprises are out of line with the desires of the majority of Sedona's citizens. *It is a point of concern that these citizens' preferences (according to the poll) have been ignored in the Dells Development Plan. According to this poll, we know*

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[3] While this may seem that few Sedona residents (3%) want to preserve the area as open space this is three percent of the one half of respondents that favored some type of recreational development. Half of Sedonans wanted no development at all.

[4] This survey information was collected for the Sedona Parks and Recreation Master Plan by Olsson Associates, a Phoenix-based firm.

A copy of the master plan can be found here: http://www.sedonaaz.gov/sedonacms/index.aspx?page=769

that less than a third of Sedona's public would favor development of an amphitheater in the area. Sedona's citizens have been asked if they would like a new amphitheater. The majority of respondents would not.[5]

Public Planning Documents

A number of public planning documents describe the environmental and aesthetic value of the existing greenway on Highway 89A. These documents reflect the strong public support for preserving and protecting this area that is valued by citizens and visitors, and is also an essential habitat for many species.

The State Route 89A Corridor Management Plan written in 2006 states that "*The Valley is framed by red rock escarpments, Mingus Mountain and ancient House Mountain, a shield volcano. Natural open spaces, clean air and starlit night skies are qualities that enhance the scenic appeal of this corridor...Looking east toward Sedona, the red rock vistas begin to inch closer and emerge, becoming more and more dominant."*

One of the key benefits identified as a part of the Corridor Management is that it will, "*Preserve the defining features of the region*."

Development of the land at Dells conflicts with the 89A Corridor Management Plan's insistence that we protect (not develop) the Dells area. It is also likely that the starlit night skies would lose their aura amid light and noise pollution that would be the inevitable result of an adjacent amphitheater. Even low-level lighting would prove a significant disruption to this currently unlit and undeveloped space.

The plan carefully describes the habitats these vistas include: "*The Mogollon Rim is a major escarpment extending almost 400 miles along a northwest-southeast diagonal through Central Arizona. Elevations along the escarpment extend from about 4,000 feet above sea level to peaks, ridges and mesas as high as 7,000 feet above sea level... Subsequent faulting and erosion of the margin of the fold exposed sedimentary layers of limestone and sandstone as it created steep walled, often dramatic canyons. Among these canyons can be counted the highly revered Sycamore Canyon and the widely praised Oak Creek Canyon. Both of these exceptionally*

[5] Though proponents of Dells Development Plan have emphasized that the percentages above reflect only poll respondents and not actual Sedona Citizens, the results of this poll were endorsed by the sitting City Council as reliable and their reliability has been described as follows: "This plan is based on an extensive and thorough public involvement process conducted over the period of over a full year (August 2011 to September 2012), and includes a statistically valid household survey of residents."

beautiful wilderness areas are readily accessible from SR 89A…As SR 89A traverses into Jerome, Clarkdale and Cottonwood, Semi-desert Grassland is the next biotic community surrounding the Verde River Valley with dominant vegetation…*Finally as the scenic corridor nears Sedona, the last biotic community is the Great Basin Conifer Woodland, typically referred to as the Pinyon-Juniper Woodland.*"

The Grassland vegetation and Pinyon-Juniper Woodlands are recognized as essential biotic communities to sustain the many species which rely on them mentioned in section 4 of the Dells Preservation Plan, "Preserve Existing Wildlife Corridors."

The Corridor Management Plan also acknowledges the value of the undisturbed landscape of the 89A corridor. "*These features predate the arrival of human populations and may include geological formations, landforms, water bodies, vegetation and wildlife. There may be evidence of human activity, but the natural features reveal minimal disturbances."*[6]

This emphasizes the value of lands that are undisturbed by people (insofar as that is possible given existing infrastructure and roadways) and that maintains a character that predates human development.

The 2006 Verde Valley Regional Land Use Plan states that, "*A common thread in the goals of Verde Valley municipal, community and county plans is to '*maintain significant Open Spaces between communities and along highway corridors*,' as noted, for example, in the Cottonwood and Sedona General Plans.*"[7]

Sedona and Cottonwood general plans have prioritized protecting the greenbelt and maintaining the separation between municipal districts. The development proposed would create a rift in the open space between Sedona and surrounding communities.

The 2012 Yavapai County Comprehensive Plan expresses the "*desire for the protection of open spaces."* One of the plan's objectives is a suggestion to: "*Use open space buffers to separate communities and preserve their identities."* One of the plan's recommendations is to, "*Discourage development in environmentally sensitive locations such as floodplains, view sheds and wildlife corridors*."

[6] http://azdot.gov/docs/default-source/scenic-routes/cmp_89a_mingus_mountain_road.pdf?sfvrsn=2
[7] http://www.yavapai.us/devserv/files/2012/03/VerdeValleyRegionalLandUsePlan.pdf

Open Space is defined in the Yavapai County Plan as *"dedicated, reserved or conserved lands, generally held in the public domain for specific purposes, such as for recreational uses, and for unique historic, environmental or scenic quality protection.*"[8]

The county that contains the Dells land expresses, through its comprehensive plan, a desire to protect these views and maintain community separation. The plan opposes development in environmentally sensitive areas.

The 2014 Sedona Community Plan states, in its Vision, that "*Sedona is a community that nurtures connections between people, encourages healthy and active lifestyles, and supports a diverse and prosperous economy, with priority given to the protection of the environment."*

It is an expectation of the plan that Sedona will, "*Consider only future uses that are environmentally sensitive, that retain an open space character, and that contribute to Sedona's environmental and economic sustainability."*

The plans also reminds us that "*Sedona is known for practices that respect and protect the natural environment, and as the responsible caretaker of one of the world's greatest treasures…The natural environment will be the dominant feature of the city.*"

The plan also expresses a commitment to "*Preserve natural open space, including areas with significant natural resource values, the riparian habitat of Oak Creek, and view sheds* ***such as ridgelines, scenic vistas, along highways, and gateways into the community,*** *"* and to "*Support the preservation of significant open space between Verde Valley communities through ongoing coordination with other jurisdictions and land trusts."*[9]

While economic development is a goal, protection of the natural environment is to be given priority over economic and other considerations. Building a large, multi-purpose recreational facility between Cottonwood and Sedona is not in alignment with the intent of the Sedona Community Plan, as it is expressed above. Such a development would disrupt a scenic vista along the highway at one of the gateways. The Sedona Community Plan calls expressly for us to

[8] http://www.yavapai.us/devserv/files/2012/03/YavapaiCountyComprehensivePlan.pdf

[9] https://www.sedonaaz.gov/Sedonacms/modules/ShowDocument.aspx?documentid=25402

be a "caretaker" of the "environment," which is related to (but not the same as) being a sustainably-minded developer.

The Vision Statement for the Red Rock/89A Corridor/Dry Creek Area of Yavapai County 2014 This plan was initiated by a citizens group who lives along the 89A corridor and along Red Rock Loop Road. This plan was submitted to Yavapai County as a supplement to the Yavapai County Comprehensive Plan. It states that, after conducting a survey with residents in the area, a "*clear majority of respondents to the community survey support a designation of a National Scenic Area, by Congress, for the public lands*" along Highway 89A. The document includes a recommendation to "*Mitigate fragmentation of the landscape, such as lot splitting and creation of mazes of new roads, which will have negative impact on scenic open space, wildlife corridors and sensitive habitats, watersheds and riparian areas.*"[10]

The community expressed a strong preference for the protection (non development) and designation of a national scenic area for the lands in question.

The unmistakable, underlying theme and common thread of these public proclamations and recommendations is that it is a priority for the Verde Valley to protect greenways and existing open spaces, specifically the view shed along SR 89A.

2. Preserve the Historical Intent to Protect and Preserve the Area

Before being acquired by the City of Sedona, the land at Dells was owned by the U.S. Forest Service. It was acquired in a land swap because, at the time, the city did not have adequate means to dispose of its wastewater effluent. If the city no longer requires the land for the purpose for which it was acquired, the land should continue to be preserved out of respect for the historic intention to include it as part of a continuous, protected, undeveloped area in the Verde Valley. Development would create an unnecessary environmental and aesthetic disruption of this largely protected and undeveloped area.

Development may also threaten important cultural and historical elements of this 200-acre site. The Old Lime Kiln Trail is an historic, 15-mile trail that was designated a National Millennium Trail in 2000. It is located in the southwest corner of the proposed development, and could be affected. This trail retraces a historic and scenic route used by produce farmers to supply the mines at Jerome. The hiking and equestrian trail is partially reconstructed, and will extend from Dead Horse Ranch State Park to Red Rock State Park and eventually to Fort Verde State Park and make a loop back to Cottonwood. Along the trail is the old lime kiln, used to make mortar

[10] http://www.rrrca.org/rural/images/VisionStatement2014.pdf

for the brick homes in Cottonwood. While a segment of this trail could be incorporated into the botanical garden portion of the Dells Development Proposal, it is likely that the trail would no longer be equestrian accessible. Development would harm the historic character of the trail and may render it inaccessible to equestrians.

3. Preserve Existing Views and Greenway

The 89A corridor provides a broad and largely unspoiled scenic vista into the Sedona Area from the west. These views are enjoyed by residents and visitors alike, and these vistas are part of Sedona's film heritage. Highway 89A connects the communities of Cottonwood, Page Springs and Cornville with Sedona. Citizens of these communities travel this route daily, commuting to and from work. Currently they are able to enjoy an uninterrupted landscape and have a reasonable traffic flow on this segment of 89A. Development at the site, especially for large-scale events, would disrupt these views and would likely cause increased traffic and congestion along this route.

Many visitors have their first glimpse of Sedona along this road. Of the millions of tourists that visit Sedona each year, many enter the community via 89A from the west, or leave on 89A heading toward Jerome and other tourist destinations in the Verde Valley. Tour buses often travel this route, giving tourists their first awe-inspiring view of Red Rock Country that slowly unfolds, as they travel through the expansive grasslands west of town. The Mogollon Rim escarpment looms across the horizon with layers of brilliant red and pink sandstone and buff-colored limestone cliffs. This offers a spectacular backdrop to the community of Sedona. An uninterrupted, dynamic landscape demonstrates Sedona's commitment to preserving the natural environment, even as a small, charming community is nestled within it. In addition, it is this undisturbed vista that was often romanticized in western movies, and is part of Sedona's film heritage.

Except for the built environment at the Sedona Wastewater Treatment Plant, the largely natural visual entry statement of the open Grassland and Juniper Woodlands into Sedona continues until the developments of Sunset Hills, and Sedona Shadows—the first obvious (and appropriate) signs of human habitation on the outskirts of Sedona city limits. Allowing development at Dells opens up the possibility of future developments along the 89A corridor, sacrificing (and potentially losing forever) what is now a treasured environmental resource and spectacular vista.

While the proposed development emphasizes sensitivity to views and surroundings, it is likely that a facility that could accommodate up to 5,000 people with a parking lot for 500 would impact the view shed and traffic flow along Highway 89A. Consider also the parking and signage needed for campgrounds, the vineyard and botanical gardens. It is difficult to imagine this complex, multi-use facility would not significantly alter the largely undisturbed area. It also seems likely a traffic light would need to be installed, disrupting the current, uninterrupted drive for commuters and visitors.

4. Preserve Existing Wildlife Corridors

Developing the land along Dells would obstruct existing wildlife corridors. Additional fencing would impede the freedom and movement of wildlife. Wildlife is already restricted by the additional chain link fencing at the Sedona Wetlands Preserve. Even though there is a barbed wire fence along the southeast side of the Dells site, it does not impose an impenetrable barrier to wildlife.

The Grasslands between Sedona and Cottonwood are critical winter range for many desert and grassland species of sparrows. Sparrow varieties include Rufous-crowned, Chipping, Brewers, Black-throated, Black-chinned, Vesper, Lark, Sage, Savannah and Grasshopper Sparrows. There are numerous other grassland species including the Loggerhead Shrike, Gamble Quail, Roadrunner and both Crissal and Sage Thrashers. These species depend directly on large areas of undisturbed grasslands for cover, seeds, and insects.

Many of the species that come to the Sedona Wetlands Preserve for water use the Pinyon and Juniper trees across the highway for nesting. These species include the Juniper Titmouse, Blue Grosbeak, Scott's Oriole, Canyon and Spotted Towhees, Western Scrub Jay and Northern Mockingbird.

In winter specifically, The Pinyon/Juniper lands across the highway from the Sedona Wetlands support hundreds of wintering berry-eating birds. In winter, the one-seed junipers are covered with ripe, juicy berries that provide sustenance for numerous bird species including Western and Mountain Bluebirds, Cedar Waxwings, American Robin, Townsend's Solitaire and Phainopepla. In good crop years, Pinyon Jays—a unique Southwest species—come in flocks to harvest the nuts from the Pinyon Pine trees.

In addition to these avian species, other wildlife, including deer, elk, pronghorn, javelina, fox, coyote, ring-tailed cat, bobcat and mountain lion may rely on this area for hunting and as a wildlife corridor. Since these lands are connected to other U.S. Forest Service lands, the Forest Service should be consulted and provide information regarding the full extent to which species habitat might be disrupted.

5. Allow Vegetation to Return to a Natural State

Vegetation in this area should be allowed to return to a natural state. It is likely that many species in the area that have developed in response to unnatural water supplies will perish and need to be removed. After that process, the area could be returned to its natural state, and blend in seamlessly with adjacent protected areas.

6. Drawbacks of Development Proposal

The majority of the Dells Land Use work group proposes a complex development plan for approximately 200 acres (leaving 80 acres as green space) that would result in a multi-use

educational, recreational, business and entertainment complex. This development includes a vineyard, orchard, botanical garden, amphitheater, multi-purpose fields, campground, gift shop, café, wine-tasting room, research facility and residences. It would also require a trailer or additional space behind the amphitheater for people to use as a changing space/green room. This extensive development has been approached with environmental sensitivity, insofar as that is possible in development. However, all development has some environmental impact, no matter how carefully conceived. We worry that despite the environmental sensitivity with which the plan is proposed, its costs outweigh the benefits. Drawbacks of the proposed development include financial investments that may not be recovered, consultant research costs, visual disruptions of the greenway, a facility that increases vehicular traffic and does not afford pedestrian-friendly options, and is also a threat to wildlife.

Infrastructure and Development Costs

Developing Dells in the manner proposed would require upfront infrastructure investment, including roads, parking lots, fences, lighting, buildings, underground electrical lines and bathrooms. This construction, no matter how environmentally sensitive, will inevitably disrupt the natural environment and obstructed views while costing Sedona taxpayers sizeable amounts of money.

Consultant and Research Costs

The development proposal includes that expert consultants be hired in (minimally) the areas listed below. This would be a significant, up-front, sunk cost for the city. The proposed recommended action for moving forward suggests "a project of such size and complexity ought to be thoroughly vetted by professional specialists/consultants in their respective areas of expertise." A firm would be necessary to employ:

- Public opinion input on development vision and proposals
- Financial analysis of individual components and project as a whole
- Market analysis of individual components and project as a whole
- Organizational options related to ownership, operation, etc.
- Risks and cost benefit analysis of options
- Evaluation of modifications to proposed uses
- Environmental impacts and benefits

This is only a partial description of the recommended steps for moving forward, but it is suggestive of the significant investment that would be required to even determine if the development proposal is feasible or viable. We recommend that before any such action is taken a disclosure of the estimated cost of the consultants and infrastructure be published in the *Red Rock News*, *Sedona.biz*, and other media outlets to give Sedona citizens an opportunity to weigh in on how they feel about the potential initial investment which would (likely be) an unrecoverable sunk cost.

It is also recommended that, before any private consultants are hired, the U.S. Forest Service is consulted about their views for potential development, and how it would impact the adjacent public lands.

Visual Disruptors

The new infrastructure and many proposed activities on the Dells site would require the City to add a significant amount of signage, indicating turn lanes as well as a number of indicators for the various proposed activities, including camping, vineyards, an education area, etc. Tourist destination signs would be a visual disruptor in an area presently unmarred by tourist destination signage.

Noise Pollution

One of the reasons frequently cited for building an amphitheater in this location is that there would be no people to complain about the noise. This is, in effect, a recommendation to create noise pollution outside of the city, and turn a pristine wildlife area into a concert hall that would disturb wildlife and interrupt the serene silence that open spaces are designed to protect. We should not be sending noise pollution to the middle of U.S. Forest Service lands.

Increased Vehicular Traffic/Lack of Pedestrian-Friendly Environment

Sedona traffic is a perennial topic of public concern. Many of the proposed concepts from the Dells Land Use Group have independent merit, and might be pursued in alternative locations within city limits, and in pedestrian-friendly locations that are more compatible with the Sedona Community Plan's vision for community gathering places. For example, a botanical garden would ideally be located within or adjacent to an already existing community or state park. It is nothing short of irresponsible to build an amphitheater, have it not work out, then leave it behind as an architectural relic while looking for a new open space to build the next amphitheater.

The recently acquired Brewer Road community park might be a suitable location for an events center, *within* city limits, and *within* walking distance for neighboring subdivisions, resorts and hotels. Creating a community gathering space there would not disturb existing greenways or wildlife corridors, and is consistent with the community plan.

Many of the proposed activities in the development are viable enterprises that would enhance the Sedona community. However, they may easily (in most cases) be pursued in alternative locations.

Vineyards are Direct Threat to Wildlife

While the development in general is a threat to the habitat of many bird populations as described in section 4, vineyards in particular pose a well-known avian threat. Vineyards and orchards are not bird friendly habitats. Birds, for obvious reasons, are drawn to the ripening fruit. In order to protect the crop farmers net grape vines and orchards. This results in birds becoming trapped in the netting wherein they must be manually removed. Many birds dehydrate waiting to be released and die or break wings or necks in their attempt to escape.

7. Exercise Extreme Caution When Using Water with Constituents of Emerging Concern (CECs) for Agricultural Uses

The City staff brought in a nationally-recognized researcher on CECs from NAU, Dr. Catherine Propper. Dr. Propper is known for her work on Constituents of Emergent Concern (CECs). She studies potential links between CECs and the disrupting effects on the endocrine systems on species and on the health of ecosystems. Dr. Propper made clear that as far as research on CEC's, it is not an area where anyone suggests that the "science is settled" or we can "rely on the experts." The experts do agree there is a potential danger and much more to learn. The effect of CECs is an area of ongoing research and we have little knowledge of the long-term impacts. It is likely that instituting a number of practices, particularly agricultural ones that make use of this water is risky at best and irresponsible at worst. When it comes to CECs, we are in uncharted waters.

Wastewater treatment/reclamation technologies and management practices are influenced by the *current knowledge* about pollutants and their fate in the environment. A know-it-all bias ignores the implications of new knowledge, especially about climate, and chemical/biological agents, e.g., past uses of industrial and agricultural materials, caffeine, unmetabolized prescription and recreational drugs, communicable/treatment-resistant diseases, etc. The modification of the arsenic standard for drinking water illustrates how uncertainty and new knowledge can affect policy. This lack of knowledge and the potential health impacts need to be given due consideration.

Pollutant research reports, such as those by Dr. Propper at NAU, EPA, ADEQ, and many others will be of little use to the general public if national leaders, and in this case, Sedona and local governments, do not work to establish policy for using the findings in the public interest – meaning for public health and welfare, environmental conservation, etc. The research by Dr. Propper and others in this field needs to be respected and taken seriously by city officials. We rely on our city officials to protect the public interest in such scenarios.

8. This Decision is an Expression of Sedona's Values that will be Visible to Residents and Visitors for Years to Come

In general, development outside of the city proper has been discouraged by surrounding communities, Yavapai County and numerous conservation groups including Northern Arizona Audubon Society, The Sierra Club, Friends of the Forest, Keep Sedona Beautiful and Oak Creek Watershed Council.

The city of Sedona was fortunate to be able to acquire the Dells Land area from the U.S. Forest Service for the disposal of its treated effluent. With construction of the evaporation ponds at the Sedona Wetlands Preserve and proposed injection wells the need for this spraying of treated water will be reduced. We believe the responsible thing to do is return this land to the purpose for which it was originally designated, which is to be protected and preserved.
The views along Highway 89A are cherished in the memory of millions of tourists and commuters who drive back and forth between communities and all the citizens that use this corridor to access hiking trails and other forms of recreation. This corridor belongs to the greater Verde Valley. It is a part of what makes this Valley a destination route.

In 1995 54% of Arizona was constituted by public lands. Today 42% of our lands our are public. The Center for the Future of Arizona's *The Arizona We Want 2.0* report tells us that what Arizonans value most is the natural beauty and open spaces of this state.[11] We hope that the decisions made about this area will protect and preserve this historic greenway that is surely one of the best-known and most-treasured scenic gateways in our state.

The choice to protect these lands (and almost all environmental preservation choices) require a longer-term vision. We need a vision that considers the unique, intrinsic value of land that is left unspoiled for the enjoyment and nurturing of people and wildlife. We need a vision of the greater Verde Valley that protects the delicate balance between its communities and the natural lands that both separates and connects them in an ecologically balanced way. As our communities continue to grow, open space will become more and more valuable both environmentally and economically. Protecting the Grasslands and the transition to the Juniper/Woodland between Cottonwood and Sedona, including the Dells area, is essential for this vision of preservation. This choice acknowledges the responsibility the city of Sedona has for the land it has acquired, the responsibility of stewardship and partnership with its neighboring communities and the delicate processes of nature. Let us strive to make decisions that will be seen by future generations as having been made with great care in the spirit of land stewardship and sustained quality of life in relationship with Sedona's precious natural ecosystems. In doing so, we will become a model and inspiration for other communities.

[11] http://www.thearizonawewant.org/reports/taww2.php

Appendix 2

A Response to the Dissenting Opinion "Dells Preservation Vision"

Two members of the Dells Land use Group have prepared a Dissenting Opinion that promotes a "no development" alternative for the Dells. The Dissenting Opinion claims that development of the Dells is inconsistent with multiple city and regional planning documents, policies, and citizen polls. The Opinion further claims that any development of the Dells would be would be inconsistent with the expressed desires of the Sedona community. The majority of the members of the Dells Land Use Group strongly disagree with the main conclusions of the Dissenting Opinion, as well as the interpretations of the many documents cited in the report that are used to support the "no-growth" alternative.

The Dells Land Use Group has spent the last year researching, debating and developing a land use vision for the Dells that reflects what the majority of its members believe to be an environmentally responsible and balanced approach that respects and promotes the concepts of open space, as well as the values of the community.

While the majority of the Dells Working Group participants acknowledge that the "Preservation Vision" for the Dells property described in the Dissenting Report is a valid option and should be included as an addendum to the final report, the Group disagrees that it represents a vision more in line with past planning efforts than the development vision proposed by the majority. The proposed land uses take into consideration the need for visual preservation of the highway corridor and for environmentally responsible development patterns for land use, buildings, and infrastructure. Contrary to the statements in the Dissenting Opinion, the following observations are offered in response to some of the statements and conclusions in the Dissenting Opinion:

1. **Claim**: "Development of the Dells is inconsistent with citizen poll preferences and planning documents." Numerous documents and citizen polls are cited in the Dissenting Opinion to support its "no development" alternative, and as mentioned above, the information in the cited reports has been misconstrued and/or misrepresented in the Dissenting Opinion. One example of this is using as justification, an informal citizens poll from the Parks and Recreation Master Plan, that only addressed the issue of recreation uses at the Dells and no other land uses. To suggest that this narrowly focused recreation survey can be somehow translated into a "no growth" justification for the Dells is very misleading. None of the documents cited in the Dissenting Opinion specifically address the development of the Dells in the manner proposed by the majority of the members of the Dells Land Use Group. In fact, prior to the Dells Land Use Vision, there has been no specific comprehensive analysis of the Dells.

2. **Claim**: "Development would create an unnecessary environmental and aesthetic disruption of this largely protected and undeveloped area." The Dissenting Opinion states that the Dells was originally acquired from the U.S. Forest service as part of a land exchange for the purpose of disposing of wastewater effluent, and that if it isn't being used for this purpose, it should…"be preserved out of respect for the historic intention to include it as a part of a continuous protected undeveloped area of the Verde Valley."

This statement is flawed for the following reasons: a) the Forest Service originally traded the land to the city because the Dells did not have the same value for preservation and protection as did the land it received in exchange for the Dells; b) the Dells has already been significantly disturbed and subjected to development with roads, pipelines, grass harvesting and other activities that have been environmentally damaging; c) the USFS put no future constraints on the land exchanged, nor any reversion clause as they have with the Airport property being used by Yavapai County; d) the claim that equestrian access to the Lime Kiln Trail would be threatened by development of the Dells is misleading. The Dells Land Use Vision does not propose eliminating the Lime Kiln Trail nor does it suggest that equestrians would not have access. This is a design detail that is more appropriately addressed at the time that a more specific plan is developed for this area, and should not be used as a reason for opposing the plan.

3. **Claim**: "Development of the Dells will disrupt the views and would likely cause increased traffic and congestion along this route." The Dissenting Opinion implies that development would significantly alter this largely undisturbed area. One of the fundamental goals of the Dells Land Use Vision is to protect and maintain the scenic qualities of Sedona's western gateway. The proposed vision is one of extremely low density, with a maximum building coverage of somewhere between 1-2%. On top of this, the proposed development is clustered in the most suitable areas, further increasing the perception of open space compared to a more evenly distributed development pattern.

The most visible half of the 200 acres is essentially preserved as natural Pinion-Juniper Woodland or Grassland, and another quarter is proposed for rural character orchards and vineyards. The remaining portion proposed for development (amphitheater, campground, buildings, roadways, and parking) will still contain a majority of open space, using native trees and natural terrain to screen the infrastructure. Most of the developed areas will be out of view of travelers on Highway 89A, and nothing would be seen from the scenic vista pullout on 89A to the west of the property, as a ridge on USFS lands rises between the viewpoint and the City property.

We agree that the regional planning directive to maintain open space between communities is important for many reasons: emphasizing individual community character, providing for positive scenic experience in between, and acknowledging limits to growth in a finite world. The Dells Land Use Vision does not

erode any of these goals, and does not imply that any more land along this corridor will be developed. The City property at the Dells is the only non-forest parcel between Sedona Shadows and Spring Creek, and it is extremely unlikely that any further USFS land will be traded away without strong community support and/or it conforming to the Forest Plan.

The Dells property already has City infrastructure and created wetlands that are more visible than any of the proposed infrastructure in the Land Use Vision. It is the Dells Land Use group's belief that rural agricultural uses are an acceptable part of the scenic foreground, and could even be viewed as a positive contribution towards the historic regional character described in the County plans. Finally, it is the Group's intent that neighboring communities could use the proposed facilities, and this would strengthen regional ties. It is unlikely that neighboring communities would fight such a proposal based on the above regional planning principles, because of the unique opportunity that this development would provide to the region, and the safeguards already in place to protect against sprawl along this section of highway corridor.

4. **Claim**: "Developing the land along the Dells would obstruct existing wildlife corridors." The Dells Land Use Group understands the specific concerns for preservation of wildlife pathways, and the need to be careful about any agricultural practices that might harm animals. These are not issues that are significant enough to reject consideration of the concept. They are details that must be considered in further refining and evaluating the land use. It is important to remember that the Dells is already an altered landscape, and that some of the wildlife patterns have been generated not only by the wetlands, but also by the spraying of effluent and the subsequent growth of new vegetation, The vegetation patterns will change one way or another as the City changes its method of disposal. With the proposed land use concept, the option exists to maintain some of this new vegetation, and even plant more in certain areas if desired or needed. It may also be found that the proposed development keeps more wildlife away from the highway corridor, to positive effect. These are all issues and details that will be studied further if there is community support for the vision.

5. **Claim**: The land uses proposed for the Dells should be developed inside the city limits of Sedona. The Dissenting Opinion claims that, while many of the proposed land uses have merit, the uses should be located within the city limits of Sedona. The Dissenting Opinion cites visual disrupters, noise pollution, and increased vehicular traffic as reasons for locating the uses within the Sedona city limits. The group discussed these issues extensively, and agreed that most development for daily use by the community should be focused in the mixed-use walkable districts delineated in the Community Plan. However, not all uses are appropriate for such areas, and none of the uses proposed in this planning concept are likely to find good homes in the heart of town. The proposed uses cannot be "…easily pursued in alternative locations" as the Dissenting Opinion suggests, due to lack of available land, traffic challenges, and noise (in the case of the amphitheater). Conversely, it is these same reasons that make the 200 acres at the Dells more suitable for the Dells Land Use Vision, as well as the fact that most of the proposed land uses in the Dells Land Use Vision require a good supply of water, which is readily available at this site.

It is also part of the proposed vision that this development would be connected to Sedona via public transit, thus countering any increase in traffic within the community. This is not because there is any capacity limitation (the 4-lane highway can obviously handle far more traffic than this proposal would generate), but because the Dells land Use Group does support the reduction of individual car trips in general as a sound community and ecological goal.

6. **Claim**: "Instituting a number of practices, particularly agricultural ones, makes the use of treated effluent risky at best and irresponsible at worst. When it come to CECs, we are in uncharted waters." The Dells Land Use Group agrees with this statement. We understand the issues with the re-use of treated effluent for food production, and these are addressed in the main body of the report. The combination of scientific research with actual production facilities is one of the main opportunities that this site and concept provides. We will all benefit from learning all we can about better ways to treat and use recycled effluent.

The Dissenting Opinion states: "We rely on our city officials to protect the public interest in such scenarios." The Dells Land Use Group agrees with this statement, and recommends that prior to the use of treated effluent more research needs to be done regarding the impact of CECs. Some agricultural uses may end up needing further treatment, but seed production for restoration, or botanical gardens landscaping, may not.

7. **Conclusion**: The Dissenting Opinion concludes with the idea that this decision will reflect our values as a community, and be visible to residents and visitors for years to come. We concur, but differ in that we see the proposed development concept as better expressing our community values than strict preservation would. The values expressed in this concept are research, recycling, education, local food production, and agency collaboration for restoration, all integrated with a celebratory venue for the performing arts and regional sharing. The Dells Land Use Group firmly believes that there are more than enough positive potential outcomes to the proposed development concept to merit further exploration. We understand that this is the first step in a process that will be further vetted via both public and professional evaluation, and that the public will be able to provide better input with this specific proposal to review.

*This reply is not written as a point-by-point response to the Dissenting Opinion, but more as a philosophical perspective on the planning issues raised, and a summary of how we feel the proposed concept furthers our community goals and vision.

Appendix 3

Overview of Effluent Management Plan

On February 26, 2014 the City Council approved changing the current effluent management program in the following ways:

1. Reduce spray irrigation to 100 acres.
2. Retain 27 acres of existing wetlands.
3. Convert a test injection well to a permanent well, and add 5 more injection wells.
4. Allow 198 acres of existing land to be re-purposed for other uses.

The current effluent management program consists of

A. Spray irrigation over approximately 275 acres.
B. 27 acres of wetlands.
C. Storage pond for balancing variations in seasonal flow disposal capabilities. (Summer and Spring tend to have higher disposal rates than Fall and Winter)

Appendix 4

Meeting Timeline

Date	Presenter	Handouts/ Recorded	Topic
July 24, 2014	Brad Jeppson (Carollo Engineers)	Handouts (slides) not recorded	• Effluent Management Plan approved by Council • Field Trip to Area 4
August 7, 2014	Mike Raber (Community Development)	Handout (Community Plan related documents)	• Community Plan concepts related to CFA 13 • Yavapai County Planning and Zoning considerations
	Mike Goimarac (City Attorney)	Handouts (legal guidelines) Not recorded	• Legal constraints related to use • Legal requirements regarding revenue issues
	Kelly Hanzel (Wastewater)	Handouts (slides) Not recorded	• Reclaimed water regulations • Uses for various classes of treated water
August 27, 2014	No guests	Recorded	• Discussion of group mission and goals • Discussion of land uses
September 25, 2014	Roxanne Holland (Community Development Engineering)	Recorded	• Discussion of injection well siting. • Discussion of land uses • Group Name • Guest Speakers

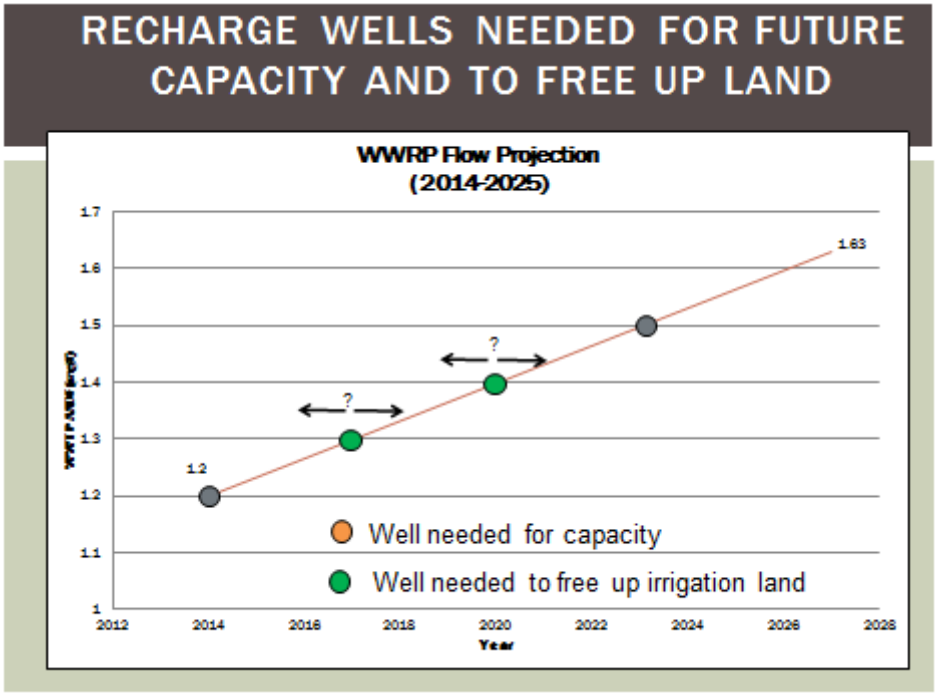
Date	Presenter	Handouts/ Recorded	Topic
October 9, 2014	Brad Hill, City of Flagstaff, Utilities Director	Handouts/ slides recorded	• Contaminants of Emerging Concern
October 23,2014	Joann Hill, Arizona Game and Fish	Handouts/ slides recorded	• Urban fishing lakes
November 6,2014	John Wesnitzer, Max Licher, (Group members)	Handouts/ slides	• Land Trade
November 12, 2014	none	none	• Field Trip Gardner Pit/ Plant Area 4
November 18, 2014	none	none	• Field Trip Garder Pit/Plant Area 4
November 20, 2014	Video https://www.youtube.com/watch?v=fQ8xOX8cn5c 5 minutes	none	• Tower Garden
	Video https://www.youtube.com/watch?v=jB7RYIlS6LQ 7 minutes	none	• Hydroponics
	Video https://www.youtube.com/watch?v=wLwwLrn2ncI 4 minutes	none	• Aquaponics
	Video https://www.youtube.com/watch?v=LK8juPotD0c 27 minutes	none	• Synponics
December 4, 2014	No guests speakers	recorded	• Open discussion
January 8, 2015	Jeff Schalau, Yavapai County University of Arizona Agricultural Extension	recorded	• Agricultural land uses and economics and concerns regarding

Date	Presenter	Handouts/ Recorded	Topic
			agricultural use on Plant lands.
January 22, 2015	Terry Burke, Live Nation	None	• Amphitheater and event scheduling issues
February 5, 2015	APS	Handouts	• Issues related to extending electric service to the property.
February 17,2015	David Gann, The Nature Conservancy	none	• Collaborative Groundwater Planning
	Eric Marcus, Verde Valley Agriculture	Handout/slide	• Economics of Agriculture in the Verde Valley
	Catherine Propper, PhD , Northern Arizona University	Handout/slides	• Endocrine Disruptors
March 3, 2015	Tom White (guest) Max Licher, John Westnitzer	Handouts recorded	• Amphitheater development and use considerations • Land use Concepts
March 17, 2015	None	Not Recorded	• Group discussion on concept drawings
April 2,2015	None	Not Recorded	• Field trip to look at locations shown on concept plan.
April 14, 2015	None	Handouts Not recorded	• Preparation of Group Report • Public input concepts discussed
May 7, 2015	None	Handouts Not recorded	• Preparation of Group Report • Discuss report sections

Date	Presenter	Handouts/ Recorded	Topic
			• Public input concepts discussed
June 4, 2015	None	Handouts	• Discuss report sections
June 25, 2015	None	Not recorded	• Discuss report sections
July 20, 2015	None	Recorded	• Discuss report sections and format
August 10, 2015	Draft Final Report	Not Recorded	• Discuss report format Dissenting Opinion and Response
August 20,2015	Final Report	Not Recorded	• Review of final report

Appendix 5

Recharge Wells Needed To Free Up Land For Other Than Irrigation Use



The green dots represent the wells needed in order to free up approximately 200 acres from spray irrigation. If the spray irrigation on the approximately 200 acres were retained only 2 capacity wells would be needed. A third well would be needed for system redundancy in case one of the wells were inoperable due to maintenance, repair, or failure. This applies up to a capacity of 1.63 MGD.

The timing of the wells for freeing up irrigation is dependent upon plans for stopping the irrigation and implementing other uses for the currently irrigated land.

Appendix 6

Land Uses Review

The documents in this section show the progression of land use considerations that lead to the development of the majority conceptual plan. Three documents are presented to show this progression.

1. August 2014 document
2. December 2014 document
3. February 2015 document

August 2014

Wastewater Land Use Group

Goals and Uses

Goals

There are many goals that will affect what land uses are suggested and preferred. Behind these goals are concepts that frame what we mean by a goal such as "sustainability". Rather than have these concepts influence the group's deliberations unnoticed it seems productive to point them out for active consideration.

- Development of the site
  - Does this mean all 200 acres have designated uses or can portions be left undesignated?
  - Does development include the concept of no improvements to all or portions of the site?
  - Can development be interim uses?
  - Can development be selling land to speculators without designating a use, only zoning?
- Economic Development
  - What is meant by economic development? What aspect of the economy is the development aimed at?
  - Does it mean that WW site uses must have paying customers or other means of direct revenue generation, such a product sales?
  - Is this a revenue source for the City? (leased land, sold land, percentage of sales)
  - Does it mean that the use has an impact on businesses in Sedona or the Verde Valley? (provides customers for businesses away from the site such as hotel, restaurants, entertainment venues)
  - Does it generate jobs or workers?
- Sustainable facilities
  - Is this about the City's ability to support the facility into the foreseeable future?
  - Should the facilities be compatible with the concept of a sustainability park? (a concept proposed in Clarkdale a few years ago. https://groups.yahoo.com/neo/groups/clarkdale_sustainability_park/info)
  - Is this about the area being essentially a self-supporting enterprise?
  - Is it a model of environmentally minimal impact uses? (low impact development, energy efficiency)
  - What is the impact on the WW Plant, highway, and adjacent Forest Lands?
  - How does the WW Plant , highway, and adjacent Forest Lands impact ?
- Effluent use
  - Will use of effluent be promoted?

    - Will use of the effluent for irrigation be promoted? (use of recovery wells or direct)
- Site Utilities
    - Will ground water under the site be used? (drinking or other uses)
    - What utilities will be brought to the site? (gas, electric, water)
- Attraction Level
    - Is the use intended to be a local, State, Regional, or National attraction?
    - Is this to be a destination facility?

Uses

There are many uses that could occur on the site. Given that 200 acres are under consideration it is possible for uses to range anywhere from no to many uses. Various uses can have different impacts on adjacent things such as the WW Plant (acceptance of view, light, and odors), the highway (view, noise, light, traffic), and Forest lands (road, camping, hiking [Lime-Kiln Trail], plants and wildlife), as examples. On site uses could impact plants, open space, wildlife, and site geology. Uses impact the need for things such a drinking water, utilities, access, parking, and wastewater disposal.

All that said, in the interest of stimulating thought about possible uses the following list is provided. You are encouraged to consider these and other uses that may occur to you.

Agriculture

Crop Farming
Algae growing
Hydroponic farming
Vintner
Community Gardens
Retreat
Orchards
Silviculture
Cattle grazing

Commercial

Retail
Restaurant
Hotel
Weekend Fair (Farmers Market, Swap Meet)
Conference Center
Outlet Mall
Cabins for rent
Box Store
Sustainability Park
Commercial Business Park

Educational

Botanical Gardens

Butterfly /Hummingbird Pavilion
Nature study area
University Research Center
Theme Villages
Created habitats (showing various habitats throughout a region)

Entertainment

Ball field (soccer, baseball)
Golf (driving range, putting, executive course)
NASCAR facility
Horse racing
Special Event Venue
Renaissance Fairs
Water Park

Sculpture Garden
Moto cross trails
Mountain Bike trails
Model Plane/boat/car
Kite Flying
Star gazing area
Bowling facility
Cross Country running course

Environmental

No development
Fishing
Hiking trails
Nature viewing area
Wetlands
Wildlife viewing area

Industry

Compost/fertilizer site
Transfer station
Manufacturing facility
Energy Storage Facility

Residential

Planned Unit Development
Apartments
Single Family

Other

_____
_____
_____
_____
_____
_____
_____

It is possible that a number of uses may catch your interest because of your concern about several goals. Keep in mind that a type of use can have several features. For instance a conference center type designation could include orchards, cabins, a restaurant, hiking, and a botanical garden with a butterfly house on part of the acreage. Surrounding acreage could be designated for open space or another type of use.

December 2014

Wastewater Land Use Group (Draft for Continued Discussion)

Goals and Uses (Revision 3 after December 4, 2014 meeting - updates are in red and green)

Goals

There are many goals that will affect what land uses are suggested and preferred. Behind these goals are concepts that frame what we mean by a goal such as "sustainability". Rather than have these concepts influence the group's deliberations unnoticed it seems productive to point them out for active consideration.

The following draft goals provide a consolidation of the Concepts discussed by the Wastewater Land Use Group on August 27, 2014. These are preliminary and are intended to provide a starting point for further review by the Land Use Group.

Site Development

- Land uses will have minimal environmental impact
- Land uses will be sited for maximum preservation of the view corridor through the area and to be minimally visible from the highway (could include designated open space).

(Both of these goals would address, or partly-address past community feedback favoring open space preservation and environmentally-friendly, low intensity uses – Community Plan, second Community Expectation)

- The site will be developed according to site plans and land uses approved by the City.
- New development will include as few highway access points as possible and provide other ways to mitigate traffic impacts including opportunities for transit, if feasible.

Economic Development

- The use of the site will directly or indirectly provide an economic benefit to the Sedona community through job creation, revenue generation or through attraction to the Sedona area.
- The use of the site will value, respect and recognize the economic benefit of protecting the surrounding National Forest.
- Development on the site will promote the environmentally-sensitive values of the Sedona area for all visitors and residents and may serve as a destination that models sustainable practices such as effluent re-use.

Sustainability

- The use of the site will be financially self-supportive and may generate revenue for the City.
- The re-use of effluent will be promoted.
- Development will incorporate water conservation measures and energy-efficient site design and building features.

Environment

- All development will comply with City's "Dark Sky" standards.
- All development will take appropriate steps to minimize the spread of invasive, exotic plant species onto the surrounding National Forest.
- Low-impact development practices should be used to manage storm water.
- On-site pedestrian access to established trail systems should be established and opportunities for unregulated National Forest access should be minimized.

Uses

There are many uses that could occur on the site. Given that 200 acres are under consideration it is possible for uses to range anywhere from no to many uses. Various uses can have different impacts on adjacent things such as the WW Plant (acceptance of view, light, and odors), the highway (view, noise, light, traffic), and Forest lands (road, camping, hiking [Lime-Kiln Trail], plants and wildlife), as examples. On site uses could impact plants, open space, wildlife, and site geology. Uses impact the need for things such a drinking water, utilities, access, parking, and wastewater disposal.

All that said, in the interest of stimulating thought about possible uses the following list is provided. You are encouraged to consider these and other uses that may occur to you.

Agriculture

Crop Farming
Algae growing
Hydroponic farming
Vintner
Orchards
Silviculture
Greenhouse
Aquaculture
Food Hub
Hydroponics
Tree Orchards

Commercial

Retail
Restaurant
Lodging
Weekend Fair (Farmers Market, Swap Meet)
Conference Center
Cabins for rent

Educational

Botanical Gardens
Butterfly /Hummingbird Pavilion
Nature study area
University Research Center
Created habitats (showing various habitats throughout a region)
Sustainability Park

Entertainment

Ball field (soccer, baseball)
Fishing
Sculpture Garden
Model Plane/boat/car
Kite Flying
Star gazing area
Multi-Use Field

Land Exchange Uses

This category identifies uses for which some of the acreage made be exchanged to facilitate development of the use at the obtained site.

Environmental

Hiking trails
Nature viewing area
Wetlands
Wildlife viewing area

Other

_____
_____
_____
_____
_____
_____
_____

It is possible that a number of uses may catch your interest because of your concern about several goals. Keep in mind that a type of use can have several features. For instance a conference center type designation could include orchards, cabins, a restaurant, hiking, and a botanical garden with a butterfly house on part of the acreage. Surrounding acreage could be designated for open space or another type of use.

Use Categories (Feb. 5, 2015)

Below is a listing of use categories and uses associated with those categories that the Dells Land use Group has associated with those categories. Those uses with an asterisk (*) are more favored uses based on discussions.

Agriculture

Crop Farming
Algae growing
*Hydroponic farming
*Vintner
Orchards
Silviculture
*Greenhouse
*Aquaculture
Food Hub
*Hydroponics
Tree Orchards

Commercial

*Retail
*Restaurant
Lodging
*Weekend Fair (Farmers Market, Swap Meet)
Conference Center
Cabins for rent
Camping

Educational

*Botanical Gardens
*Butterfly /Hummingbird Pavilion
Nature study area
*University Research Center (water focused)
Created habitats (showing various habitats throughout a region)
*Sustainability Park

Entertainment

Ball field (soccer, baseball)
*Fishing
Sculpture Garden
Model Plane/boat/car
Kite Flying
Stargazing area
*Multi-Use Field
*Amphitheater

Land Exchange Uses

This category identifies uses for which some of the acreage made be exchanged to facilitate development of the use at the obtained site.

Appendix 7

Survey Rankings

Responses

	Low					SCORES					High
Concept Idea	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1. Native Greenbelt								2		1	5
2. Native Grass Seed Prod.				1	4	1			1	1	
3. Vineyards			1		1	2	1	3			
4. Winery & Deom Orchard/Perm.	1		1		1	1	3	1			
5. Research/Educ. Center					1	1	3	1	1		1
6. Staff Housing				2	2	1	1	1	1		
7. Parking			1						3		4
8. Roadway							1		3		4
9. Amphitheater/Festival Grounds	1		1						2		4
10. Orchards					1	2	1	2	1		1
11. Agricultural Bldgs./Greenhouses					2	2	1	1			2
12. Botanical Gardens/ Int. Trails					2	1	2		2	1	
13. Campgrounds	2			1		1	1		1	1	1

The table above presents the number of survey respondents giving a concept the score indicated.

Weighted Responses

	Total Points From Group Responses											
Concept Idea ↓ Score →	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Average**
1. Native Greenbelt	0	0	0	0	0	0	0	14	0	9	50	9.125
2. Native Grass Seed Prod.	0	0	0	3	16	5	0	0	8	9	0	5.125
3. Vineyards	0	0	2	0	4	10	6	21	0	0	0	5.375
4. Winery & Demo Orchard/Perm.	0	0	2	0	4	5	18	7	0	0	0	4.500
5. Research/Educ. Center	0	0	0	0	4	5	18	7	8	0	10	6.500
6. Staff Housing	0	0	0	6	8	5	6	7	8	0	0	5.000
7. Parking	0	0	2	0	0	0	0	0	24	0	40	8.250
8. Roadway	0	0	0	0	0	0	6	0	24	0	40	8.750
9. Amphitheater/Festival Grounds	0	0	2	0	0	0	0	0	16	0	40	7.250
10. Orchards	0	0	0	0	4	10	6	14	8	0	10	6.500
11. Agricultural Bldgs./Greenhouses	0	0	0	0	8	10	6	7	0	0	20	6.375
12. Botanical Gardens/Int. Trails	0	0	0	0	8	5	12	0	16	9	0	6.250
13. Campgrounds	0	0	0	3	0	5	6	0	8	9	10	5.125

The table above is derived by multiplying the number of responses at a point level by the point level. For instance if 3 people rank a concept at 7 and 2 others rank it at 10 then that concept would have a total score of 41 points. (3 X7=21 plus 2X10=20 21+20=41) The average score is derived by dividing the total score by the number of respondents. In this case 41 is divided by 5. The average is 8.2 points.

Based upon the average scores the ranking of the various concepts is:

1. Native Greenbelt
2. Roadway
3. Parking
4. Amphitheater/Festival Grounds
5. Orchards
6. Research/Education Center
7. Agricultural Bldgs/Greenhouses
8. Botanical Gardens/Internal Trails
9. Vineyards
10. Campgrounds
11. Native Grass Seed Production
12. Staff Housing
13. Winery & Demo Orchard