City of Santa Fe

# Agenda

## MUNICIPAL TREE BOARD

**A Subcommittee of the PARC (Parks & Recreation Advisory Commission)**
**Conference Room at Parks & Recreation Dept., 1142 Siler Road, Bldg C**
**Friday, January 10, 2020**
**1:30 pm**

1. Call to Order
2. Roll Call
3. Approval of Agenda
4. Approval of Meeting Minutes for November 27, 2019
5. Old Business and possible action
   A. White Paper review and approval
   B. IT inventory project
   C. New board member
6. New Business and possible action
   A. 2020 goals
   B. River inventory
   C. Tree City USA status
7. Comments from the Board
8. Public Comment
9. Date and Time of next meeting- Wednesday, February 26, 2020 at 11:30 am
10. Adjourn

**Persons with disabilities in need of accommodations, contact the City Clerk's office at 955-6520, five (5) working days prior to meeting date.**

| RECEIVED AT THE CITY CLERK'S OFFICE | |
|---|---|
| DATE: | January 2, 2020 |
| TIME: | 9:04 AM |

# SUMMARY OF ACTION
# MUNICIPAL TREE BOARD
# PARKS AND RECREATION DEPARTMENT
# 1142 SILER ROAD, BUILDING C
# FRIDAY, JANUARY 10, 2020, 1:30 PM

| ITEM | ACTION | PAGE |
|---|---|---|
| CALL TO ORDER | | 1 |
| ROLL CALL | QUORUM | 1 |
| APPROVAL OF AGENDA | APPROVED | 1-2 |
| APPROVAL OF MINUTES | APPROVED | 2 |
| **OLD BUSINESS AND POSSIBLE ACTION** | | |
| WHITE PAPER REVIEW AND APPROVAL | APPROVED | 2-4 |
| IT INVENTORY PROJECT | APPROVED | 4-6 |
| NEW BOARD MEMBER | APPROVED | 6 |
| **NEW BUSINESS AND POSSIBLE ACTION** | | |
| 2020 GOALS | APPROVED | 6-7 |
| RIVER INVENTORY | INFORMATION/DISCUSSION | 7-8 |
| TREE CITY USA STATUS | APPROVED | 8-9 |
| COMMENTS FROM THE BOARD | INFORMATION/DISCUSSION | 9 |
| PUBLIC COMMENT | INFORMATION/DISCUSSION | 10-11 |
| NEXT MEETING | FEBRUARY 26, 2020 | 11 |
| ADJOURN | ADJOURNED | 11 |

**MUNICIPAL TREE BOARD**
**PARKS AND RECREATION DEPARTMENT**
**1142 SILER ROAD, BUILDING C**
**FRIDAY, JANUARY 10, 2020, 1:30 PM**

## 1. CALL TO ORDER

The meeting of the Municipal Tree Board was called to order by Katherine O'Brien, Chair, at 1:30 pm, on Friday, January 10, 2020, at the Parks and Recreation Department, 1142 Siler Road, Santa Fe, New Mexico.

## 2. ROLL CALL

**MEMBERS PRESENT**
Katherine O'Brien, Chair
Tracy Neal
Pam Wolfe
Jacob Pederson
Vacancy

**MEMBERS ABSENT**
Becky Touchett, Excused
Nancy Varvil, Excused

**OTHERS PRESENT**
Richard Thompson, Parks Department
Victor Lucero, IPM Manager
Keely Jackson Kennemore
Mary Schruben
Athena Beshur
Leah Cantor, Santa Fe Reporter
Elizabeth Martin, Stenographer

## 3. APPROVAL OF AGENDA

**MOTION** A motion was made by Mr. Neal, seconded by Mr. Pederson, to approve the agenda as presented.

**VOTE** The motion passed unanimously by voice vote.

## 4. APPROVAL OF MINUTES

**MOTION** A motion was made by Mr. Neal, seconded by Ms. Wolfe, to approve the minutes as presented.

**VOTE** The motion passed unanimously by voice vote.

## 5. OLD BUSINESS AND POSSIBLE ACTION

### A. WHITE PAPER REVIEW AND APPROVAL

Chair O'Brien said the reason for this early meeting is that the Parks and Recreation Director requested that we create this white paper covering our suggestions for urban forest maintenance. Since we are a subcommittee of PARC, and they meet on January 21st, we decided that in order to expedite this for approval we needed to meet before PARC. We will review and hopefully approve the white paper today.

The white paper is herewith attached to these minutes as Exhibit "1".

Chair O'Brien said this white paper was put together with input by the entire Board. The main writing was done by Jacob, Tracy and Becky. She appreciates everyone's hard work on this. Does anyone have any changes to propose to the document.

Ms. Wolfe said she had a question about item 3 and a general comment. It talks about creating a Tree Innovation Task Force and the roll of the Tree Board is unclear in that to her. So do we need a second or different committee.

Chair O'Brien said it would be composed of representatives of relevant City departments, land developers and others.

Mr. Pederson said maybe we can rework this. It is not intended to replace the Tree Board. We need a bigger tent to bring our position to and to work within the City to expand our group of partners to improve tree policy in the City. There are a lot of things the City can do on the RFP side, specifically on bids. We need to get people in the City together to start implementing ideas. The Tree Board can say do these things, but in terms of implementing them it would be smart on the part of the City to ask how do we implement this.

Mr. Thompson said it is a timing thing. Jacob is right. It is a tangent of the Municipal Tree Board rather than replacement. One of the things about the Tree Board

is that it is a subcommittee of PARC. Every time we meet we have to post and record and publish. John's Citizen Action Committees meet more often than monthly. He suggests an ad hoc committee of the Tree Board that could report back to Tree Board.

Mr. Thompson said this is a leap into the future.

Mr. Pederson said the white paper is a request from John. The intent of this item is to say show us the implementation ideas you are putting out there so we can look for opportunities.

Mr. Neal asked what about calling it an Urban Forest Management Group.

**MOTION** A motion was made by Mr. Pederson, seconded by Mr. Neal, to strike the name of the group and replace it with Urban Forest Management Group.

**VOTE** The motion passed unanimously by voice vote.

Ms. Wolfe said it struck her that this is the kind of thing like the sidewalk at the library where we just heard what they were going to do and did not have input into what they were going to do.

Mr. Pederson said imagine that we would find out the action before it happens. We would have greater awareness now if we were on the task force. We need to just say to have the Municipal Tree Board represented.

Mr. Thompson said we were consulted before. We told them to raise the grade of the sidewalk which was not possible at the time. Then the project was transferred to Public Works and they put it out to bid.

Mr. Pederson said where the rubber meets the road is when the contract is put out to bid. It has to be in there. If there is a task force with the public represented, it could help grow an institution of awareness so when people put projects out to bid they will have best practices to follow.

**MOTION** A motion was made by Mr. Neal, seconded by Mr. Pederson, to change the second sentence in the section creating the group to read and members of the Municipal Tree Board.

**VOTE** The motion passed unanimously by voice vote.

Chair O'Brien said in reading the first paragraph, the last sentence, it says 237 trees were removed this year. Since we are in 2020, it should say in 2019.

Mr. Pederson said that is a good catch. Can we get an updated number on that.

Mr. Thompson said that was the accumulation of trees that had been dying or decaying over the last three years and were targeted for removal. They were all removed in 2019. 237 trees.

Mr. Pederson said the number is correct in that case.

Ms. Schruben asked on page 2, item 4, why are the Master Gardeners not listed as a partner in the inventory project.

Mr. Pederson said we cut this down to fit on 2 pages.

Ms. Schruben said on item 6, the first sentence, add soil, water and vegetation.

Mr. Pederson said this is really only talking about trees.

Ms. Schruben said in the bullets it says maintain a neighborhood tree steward program, but do we have a steward program to maintain.

Mr. Neal said change the word maintain to develop.

Mr. Pederson said it should say establish and maintain. We can make that change.

**MOTION** A motion was made by Mr. Neal, seconded by Ms. Wolfe, to approve the white paper with the changes as discussed.

**VOTE** The motion passed unanimously by voice vote.

## B. IT INVENTORY PROJECT

Mr. Pederson reported that John Munoz wrote a memo specifying the details of what we were requesting from IT. In late November we met with IT. We agreed that basically on what the memo said. Additionally, IT is going to set up accounts so he and Becky can get their own logins so they can support Victor. We met with Victor and IT after that meeting and talked about implementing the pilot project. IT wants to roll out ARC Enterprise to the entire City. He and Becky are going to be debriefed on next steps next week and he will follow up with IT to see what progress they have made.

Mr. Lucero said he spoke with Philip Pacheco and they are working on establishing access here for two staffers, him and Andrew Garcia.

Mr. Pederson said once that happens he and Becky will work with Victor and Andrew. They will start learning the software. We will have something to show at their roll out for the entire City. It will tell the story of trends to be used for management.

Chair O'Brien asked has ARC Enterprises been received by the City yet.

Mr. Pederson said it was approved by the Finance Committee and they have purchased it. It is a powerful, deep piece of software. It will be a new experience for the folks in the City.

Chair O'Brien said well done to you and Becky.

Mr. Pederson said Becky did most of the coordination.

Mr. Thompson said as part of the budget process, Larry Worstall has asked departments to identify any hardware and software they would need for the next fiscal year. Becky mentioned at last months meeting that Tree Plotter may not be needed. We will need to make a decision on that for our budget.

Mr. Pederson said it will be covered by ARC.

Ms. Beshur said regarding the relationship between Tree Plotter and ARC, Plotter allows for collection in order to bring over information to GIS. It works seamlessly now and is easily done.

Mr. Neal asked so if we are using Tree Plotter we don't need ARC Collector.

Ms. Beshur said Tree Plotter is perfect for the tree inventory for collecting data.

Mr. Pederson said the answer is we have ARC Collector. There is no extra cost to the City. He agrees that for volunteers Tree Plotter is the one for them. The benefit to getting it in Collector is the cross compatibility with all the City data.

Ms. Schruben said for example, Collector would put in irrigation, and other systems included such as sidewalks that can be used for those items.

Mr. Thompson said the utilities are already on the Geocortex. The Tree Board needs to decide if we are going to renew the purchase of Tree Plotter.

**MOTION** A motion was made by Mr. Neal, seconded by Mr. Pederson, to renew the license for Tree Potter for one year.

Mr. Pederson said we have not even started this new system yet so it makes sense to continue Tree Plotter for a year.

**VOTE** The motion passed unanimously by voice vote.

### C. NEW BOARD MEMBER

Chair O'Brien said she sent the Board members the resume for Ryan Brenteson as a possible replacement for John Formby on the Board.

The resume is attached herewith to these minutes as Exhibit "2".

Mr. Neal said he had talked to him several times. He would be a good addition to the Board.

Chair O'Brien said she has worked with him several times. We also shared a customer. We both got good reports from the customer. She likes him because he is interested in doing quality work. She thinks in order to have him at our meetings, we will need to meet at noon and eat our lunches here. She will email him all the information about the Tree Board. He is interested.

**MOTION** A motion was made by Mr. Neal, seconded by Mr. Pederson, to approve the recommendation of Mr. Brenteson as a member of the Tree Board to PARC for approval.

**VOTE** The motion passed unanimously by voice vote.

## 6. NEW BUSINESS AND POSSIBLE ACTION

### A. 2020 GOALS

Chair O'Brien said she sent out the 2020 goals to the Board members. The reason for goals is to keep us on track on what we intend to accomplish. They provide guidance for us as a Tree Board. Anytime during the year we can change our goals.

The 2020 goals are herewith attached to these minutes as Exhibit "3".

Mr. Neal said he had one wording change. On number 6 instead of see City Councilor support, say Councilors.

Ms. Wolfe said she wanted to verify number 3. We talked about a banner and a weather proof poster. Richard said he could produce that. Before we did a three panel thing that we could have outdoors.

Mr. Thompson said our laminator will take bond paper, but not fiber board. We could pay to put a poster on vinyl.

Ms. Wolfe said she thinks vinyl would be appropriate.

Chair O'Brien said we can go into that at the next meeting.

Ms. Schruben said the only thing she feels is not in here is an explicit statement for the Tree Board to partner with other City committees and task forces to accomplish our goals and their goals.

Mr. Neal asked what do you mean by partner.

Ms. Schruben said such as with the River Commission on inventorying the trees on the river.

Mr. Neal asked in what Mary is suggesting, for future meetings how would that work. It is good to coordinate.

Chair O'Brien said we could add coordinate with other entities.

**MOTION** A motion was made by Mr. Pederson, seconded by Ms. Wolfe, to approve the 2020 goals with the changes discussed.

**VOTE** The motion passed unanimously by voice vote.

Mr. Thompson suggested that the 2020 goals be put on the website.

**B. RIVER INVENTORY**

Chair O'Brien said this is on the agenda as a follow up to the interest of the Watershed Association in doing an inventory around the river.

Ms. Pederson said his position is we have a lot of work on our inventory ourselves. It is the basis of a lot of work we want to get done. Our priority should be our own inventory of the City parks.

Ms. Schruben said last night at the River Commission there was a discussion about studying and starting on a new project. Their issue is to remove invasive species around the river as a river issue.

There was a discussion around the River Commission and their desire to possibly work with the Tree Board around an inventory of trees around the river and how that might work with their project to identify invasive species to remove and what to preserve. Also they have suggested having a member of their Commission come speak to the Tree Board and having a member of the Tree Board come speak to their Commission. That is something the City Liaisons for each Board will need to speak

about.

Ms. Wolfe said if they want, they could send some members or others to our volunteer training programs to learn what the inventory is about.

Chair O'Brien asked Ms. Kennemore if the Watershed Association has made any progress on the project.

Ms. Kennemore said it has been up in the air for some time. She would need to recheck on it.

Chair O'Brien said we need information from the Master Gardeners Association about if and when they need input from us.

Ms. Beshur said she is still a co-leader for that. Becky and she will make the dates for training and inventories. We have some parks as priorities. To Pam's point she will invite Melissia McDonald to the tree inventory events. There are several options available, but she agrees we should focus on the parks for the initial ten sessions we have committed to.

## C. TREE CITY USA STATUS

Mr. Thompson said last year we read the Proclamation into the record and have addressed what is required for application for membership. For Arbor Day, the official day is the last Friday in April for the celebration.

Chair O'Brien asked will we receive the designation.

Mr. Thompson said he is sure they will. Does the Tree Board have any interest in adding a Tree Protection Ordinance to the Land Use Code. We would develop an Ordinance with the staff liaison and the Land Use Department. We would look at industry standards and propose an Ordinance through PARC. It will need to be proposed prior to the update of the Land Use Code. It would go to City Council for approval and public hearings.

Mr. Neal asked do we want to add that to our goals for this year.

Chair O'Brien said she is in favor of that.

**MOTION** A motion was made by Mr. Neal, seconded by Mr. Pederson, to add the development of a Tree Protection Ordinance for the Land Use Code to the 2020 goals.

**VOTE** The motion passed unanimously on a voice vote.

Mr. Thompson said he will send what is in the code now to Board members.

Ms. Schruben said in last nights discussion at the River Commission they said they are planning to have an Earth Day Festival for the entire month of April. It is the 50th Anniversary of Earth Day.

## 7. COMMENTS FROM THE BOARD

Chair O'Brien said she, Athena and Becky represented the Tree Board to receive an award from the Parks and Recreation Department. She passed around the award.

Chair O'Brien continued, we were commended mainly for our work with Tree Plotter which Athena and Becky had a lot to do with. She thanks everyone for that. It was nice to be recognized for the work we do.

Chair O'Brien said in October Mary told us that the Urban Tree Council had scholarship money available for the Think Trees Conference or the Arid Land and Water Conference. She applied for scholarships as a Tree Board and we received two for Think Trees. Pam and Becky are going. Thank you Mary for bringing that up.

Mr. Pederson said when we talked about the item of hiring a City Forrester, his understanding is that the City hiring a City Forrester is the top thing the City can do to get the ball rolling for what we are recommending in our white paper. He did not mention that today and wanted to make sure that was stated.

Mr. Pederson and Mr. Neal offered to go meet with the City Manager or whomever is necessary in support of this movement.

Ms. Cantor asked how much does is cost to hire that position.

Mr. Thompson said we asked for five craft positions this year and an Urban Forester was estimated at a base salary of $50,336. With benefits and retirement that goes up to $85,713. We will bump that up a bit for our ask this time.

Ms. Cantor said she is interested in the technology you are talking about. Who would be best to discuss that with.

Mr. Pederson said he would be for the City efforts and Athena for Tree Plotter.

## 8. PUBLIC COMMENT

Chair O'Brien said she invited Athena to come today because at the award luncheon, John Munoz asked her to come up with a document showing a conceptional design for southwest urban forestry in Santa Fe, New Mexico.

The conceptional design document is herewith attached to these minutes as Exhibit "4".

Ms. Beshur said she has been working on her Masters Degree and just finished. As part of that topic was play space metrics and urban forestry design. As part of that she created a conceptional design framework. This is based on her work and research. It is somewhat geographical as well as conceptional.

Ms. Beshur reviewed the design and the concepts as described on the back of the design document. Her paper is available online through the website. Https://sowsfe.com/langunitas/. She is also happy to email her document to everyone.

Mr. Pederson said we need to create the subsurface conditions that work for trees. The point of the task force is to look at developments like the Midtown Campus and the St. Michaels Corridor. It is a huge opportunity for us to make an investment in supporting trees.

Ms. Beshur said we need to plant trees that will be around in 15 years.

Chair O'Brien said thank you Athena for coming.

Mr. Lucero said as far as insects Sonora Aphids are active this time of year. He is keeping up with things happening with the Emerald Ash Borer around the country. It has moved out of the containment area in Boulder so there is no longer a quarantine in place. It is knocking on New Mexico's door. It is still quite north at this time, but the potential is there. He will be putting out at some sites this spring a funnel monitoring trap. Monitoring pest populations is part of his job description. People are still selling and planting Ash trees.

Chair O'Brien said she is so glad he is back.

Mr. Neal asked what do you think is the likelihood that it will land here in the foreseeable future. Also what about Oak Wilt.

Mr. Lucero said anything can happen. We have a proactive Department of Agriculture that maintain standards in monitoring nursery stock in the state. The first step to maintain protocols for invasive species, pathogens and insects.

Mr. Thompson said firewood coming from outside the State is always an issue.

Mr. Lucero said with respect to that, 14.7% of our current inventory of trees are Ash. We have to have an aggressive, proactive stance on planting trees of different species that are suitable for our environment.

Ms. Schruben said on Thursday, January 23rd, the City Water Conservation will be holding a public meeting to present their 5 Year Water Plan. It will be at 5:30 pm at the Southside Library. It was approved by City Council and there will be workshops in June for homeowners to help them make plans and assist them.

Ms. Schruben said at last nights City Council meeting they talked about reorganizing the Council Standing Committees and all the Boards and Commissions. They are going to reorganize effective April 8th. This is an opportunity for us to reorganize under Public Works and Public Utilities. We need to look seriously at that. There is also a big push to consolidate Boards. It is something to think about.

Mr. Neal asked Ms. Cantor what brought her to the meeting today.

Ms. Cantor said she saw the item about your goals for 2020 and the interaction between technology and updating the City for sustainability broadly. Those are things she is interested in.

Mr. Lucero reminded everyone that trees still need to be watered in winter.

Chair O'Brien said that is a good thing for the website.

**9. NEXT MEETING**
**FEBRUARY 26, 2020, 11:30 AM**

**10. ADJOURN**

There being no further business before the Board the meeting adjourned at 3:50 pm.

Katherine O'Brien, Chair

Elizabeth Martin, Stenographer

# A Path Forward for Santa Fe's Urban Forest

THE SANTA FE MUNICIPAL TREE BOARD

Santa Fe's trees are suffering, and we need to act now to protect our urban forest. Climate change stresses trees through higher temperatures, frequent and prolonged droughts, and unprecedented outbreaks of diseases and insects. Hydrology is also changing, and groundwater can no longer be relied upon to sustain many of our trees. We have more trees in our parks than staff can properly maintain, new parks continue to be added, and we are not planting enough trees to keep pace with losses. This year, Parks and Recreation has removed over 250 dead, dying, or hazardous trees.

All of this leads to an urban forest that will continue to decline if nothing is done. It will require new investment, improved management practices, better data, smart planning, and robust community engagement to reverse this trend and lead to a more sustainable and vibrant urban forest.

This paper presents a path forward, including immediate and long-term actions, that will keep Santa Fe growing in a positive direction now and in the future. While these recommendations focus primarily on the Parks and Recreation Department, meeting our goals will require citywide coordination and leadership.

## IMMEDIATE ACTIONS

These actions can begin immediately but may take some time to complete. They are intended to build a foundation for continuous improvement of urban forest planning and tree care.

1. **Hire a City Forester.** Santa Fe's highest priority for improving planning, management, and outreach should be hiring dedicated leadership for managing its urban forest. Responsibilities of the City Forester should include but not be limited to the following.
    - Management of the City's Tree Inventory
    - Oversight of tree care staff and supervision of outside contractors
    - Coordination with other City departments in order to ensure best practices for tree choice, placement, and care
    - Development and maintenance of an Urban Forest Management Plan

2. **Review and Evaluate Existing Tree Management and Capacity**. To improve tree care, it is necessary to know what systems are being improved. Perform an internal assessment of existing management systems and capacity. Establish annual performance goals based on the results. The evaluation should include:
    - An overall budget assessment
    - Evaluation of staffing assignments and workloads
    - Professional tree care contracting practices
    - Staff training and accountability

3. **Establish Tree Innovation Task Force.** – Creatively expand opportunities for tree planting and the potential for larger, healthier trees. Support the new City Forester in establishing a Task

Exhibit "1"

Force composed of representatives from relevant city departments, developers, landscape professionals and other community members. Collaborate with the Task Force to identify opportunities for implementing modern management techniques, such as soil cells and water catchment systems. Provide recommendations for land use code updates. Provide support and recognition for innovative planning and construction projects. Broadly promote successful projects in traditional and social media.

4. **Complete the Parks Tree GIS Pilot Project and Tree Inventory.** Continue partnering with the City ITT Department to use the current tree inventory to evaluate trees by park and council district. Present this analysis at the ITT Department roll out of Citywide Enterprise GIS.

5. **Issue a contract for completing a comprehensive tree inventory of all public trees in Santa Fe.** Maintain the inventory for prioritization of maintenance, removal, and planting activities.

## LONG TERM ACTIONS

The following actions will build on initial successes:

6. **Develop a comprehensive Urban Forest Management Plan.** Articulate a clear vision for Santa Fe's urban forest. Provide a "State of the Forest" description of forest structure. Describe management practices and achievements. Establish goals for canopy cover and species composition. Monitor progress toward goals and update the plan accordingly.

7. **Transition away from temporary workers.** Promote or hire more full time, experienced personnel. Match FTE's with specific parks and public landscapes. Develop a crew of ISA Certified Arborists. Purchase and maintain all necessary equipment for tree care operations.

8. **Improve data tools and incorporate them into decision-making processes.** Assign a Parks employee to train other staff and develop capacity in the use and maintenance of GIS data. Expand beyond tree data to establish feature classes for other assets including, but not limited to, irrigation, plantable space, soils, and more.

9. **Educate and involve the public in tree care and maintenance activities.**
    - Host a "Convention of Trees." Showcase and leverage partnerships with community groups, local colleges, and other private initiatives centered on tree care and maintenance.
    - Maintain *Neighborwoods* and *Tree Stewards* community programs. Reach out directly to residents in each district to establish networks of volunteers who help develop local projects. Support projects by providing training in tree care and project management. Establish partnerships with non-profits, community groups, and sponsoring businesses in order to expand the reach and impact of community-led projects.

7296 Baca St
Santa Fe, NM 87505
(505) 819-3649
ryan@verygoodtreeservice.com

# Ryan Brenteson

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Position applying for: Santa Fe Tree Board

## WORK EXPERIENCE

**Very Good Tree Service- New Mexico** *November 2016-Present*
*ISA Certified Arborist*

**National Park Service- Bandelier NM** *March 2015-2016*
*Assistant Engine Captain- Los Alamos, NM*

**National Park Service- Bryce Canyon NP** *May 2013-November 2014*
*Wild Land Firefighter– Bryce, UT*

## EDUCATION

**University of Montana, Missoula, MT** *August 2009 – December 2012*
*B.S. in Forest Resource Management*

**University of Helsinki, Helsinki, Finland** *January 2011- June 2011*

**New Mexico Institute of Mining and Technology, Socorro, NM** *August 2005 –May 2007*

**Mountain View High School, Vancouver, WA** *September 2001 –May 2005*

Exhibit "2"

Municipal Tree Board Goals for 2020

1. Finalize a white paper that describes the board's recommendations for maintenance of the city's trees.
2. Work with city's IT Department to make tree inventory information available and usable
   a) Develop pilot project demonstrating how ArcEnterprise can be used in city depts
   b) Assist Parks Division in uploading and using inventory information
3. Assist City Parks Division in celebrating Arbor Day
   a) Determine date and location for event
   b) Recommend tree (s) for selected site
   c) Request that the Parks Dept. create publicity
   d) Verify that a city official will be present to make the proclamation
   e) Verify that property documentation of event is submitted to Tree City USA
4. Provide support for tree board website
   a) Submit updated information to Carlos Sanchez on a regular basis
   b) Complete unfinished areas, such as tree news, pest info
5. Support city wide tree inventory
   a) Provide assistance in tree identification
   b) Explore the possibility of an inventory of trees along the river bed
6. Participate in city sponsored events that may give the tree board visibility
7. Seek a city councilor's support of the tree board's mission and goals.
8. Research neighborhood tree programs, such as Tree Stewards and Neighborwoods, to determine their appropriateness for Santa Fe.

Exhibit "3"

## Conceptual Design Framework for Southwest Urban Forestry in Santa Fe, NM

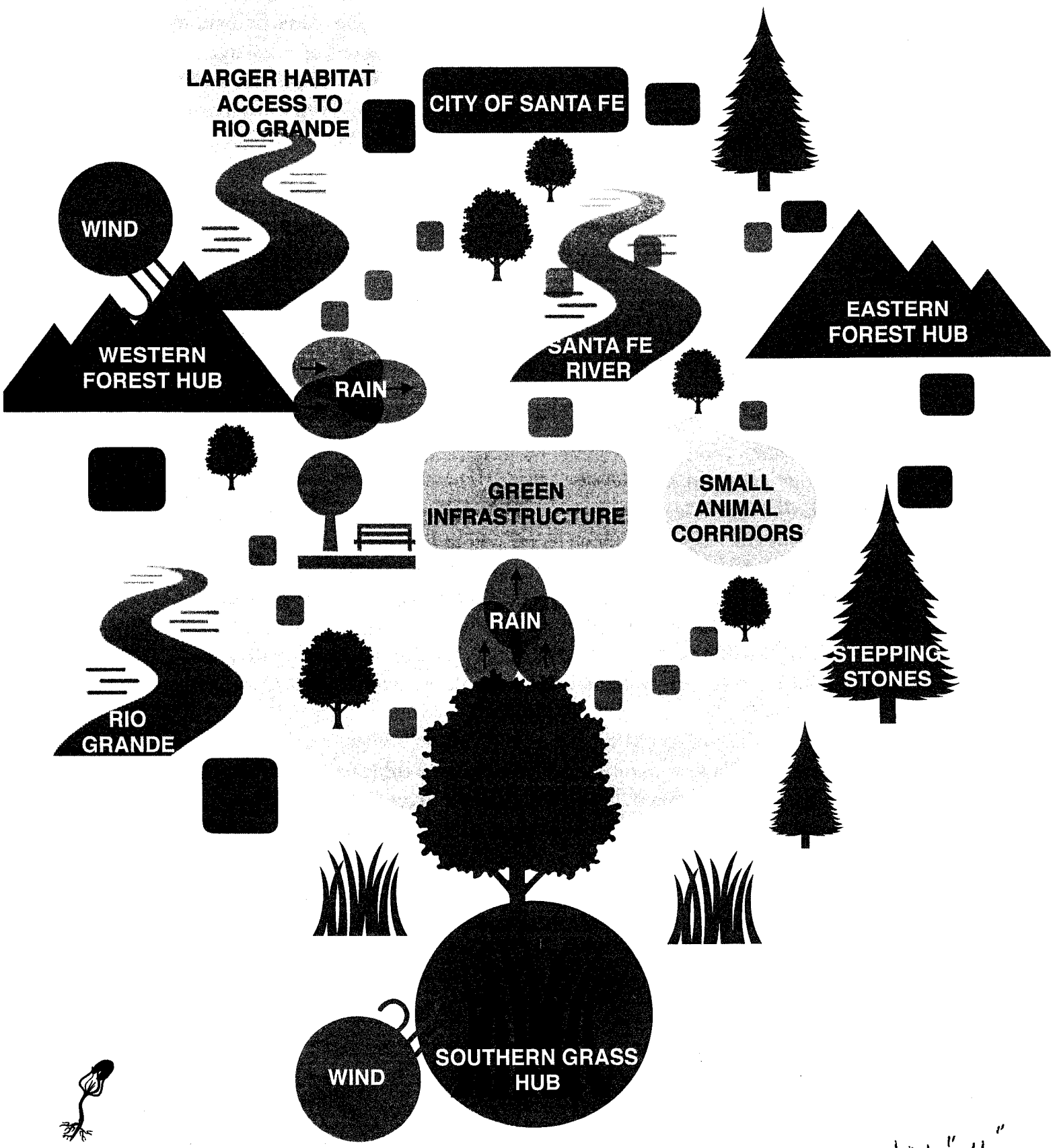



Exhibit "4"

## Urban Forestry Recommendations for Santa Fe, NM

Urban forestry initiatives are required within the framework of public planning and private construction. By incorporating an urban forestry designer onto the teams that are molding the future of the city, the urban forester can bring forward the needs of trees and wildlife into design plans as well as architectural standards. The urban forest incorporates all trees within the urban and surrounding space, and large scale construction ought to unify green infrastructure with the grey infrastructure to make best use of both.

Forest hubs need linkages a minimum of 1,100 feet wide to guide large animals safely around the city to access water sources, follow historic and climate driven migration patterns, and find protection during wildfire. Buffering fragmentation of forest edges will improve conditions for inner-forest habitants. Creating stepping stones of pocket parks and corridors throughout the city will improve bird habitat, which in turn will reduce tree pests. Large scale hub designation will offer inner city sanctuary. In this way, smaller animals can live safely within the growing city. These hubs are not manicured parks, but rather open natural spaces that will additionally provide the permeable surface for stormwater infiltration.

Because wind most often comes between the mountain ranges from the southwest, Santa Fe is uniquely positioned to plant trees which will provide moisture up-wind and into the city. This rainfall could then provide soil moisture which will continue this cycle by supporting tree growth down-stream. Growing green space within the southern portion of the city additionally addresses the needs of citizens who would like to create a sense of place along the Airport Road corridor (Lewin 2019). This includes having 10-foot sidewalks for passing pedestrians on trails off of the main road which connect larger open spaces. Utilizing green infrastructure protocol will help grow the urban canopy. This canopy and these corridors will develop a place for community connection and culture creation.

Santa Fe needs to plant hundreds of trees per year, guide stormwater to these and existing trees and provide standards to allow for trees to have 1,500 cubic feet of non-compacted soil for root growth. Mulch and compost need to be utilized to build soil food webs and hold moisture within soil. These are available and are desperately needed in every park that has been inventoried. Curb cuts allow water to enter permeable medians and open spaces.

Visioning for a future livability incorporates the needs of citizens and animal life. New urbanism is one that unifies with the native environment, incorporates local based plant selections and provides refuge for plants and animals under threat from the unpredictable future climate. It is one that safeguards precious water resources and values trees as suppliers of inland moisture.



*Seeds of Wisdom, LLC*

## Conceptual Design Framework for Southwest Urban Forestry in Santa Fe, NM

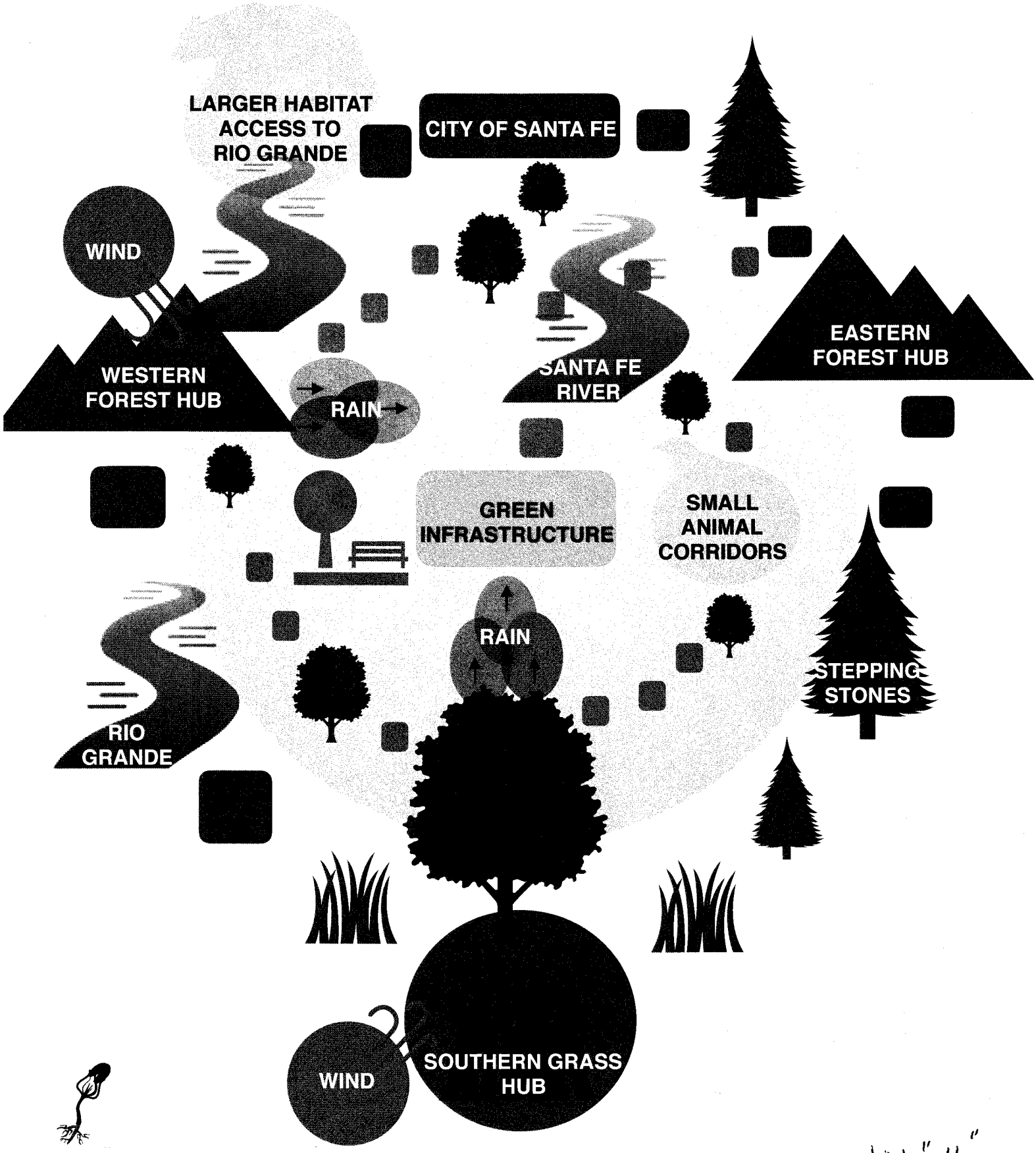



Exhibit "4"

## Urban Forestry Recommendations for Santa Fe, NM

Urban forestry initiatives are required within the framework of public planning and private construction. By incorporating an urban forestry designer onto the teams that are molding the future of the city, the urban forester can bring forward the needs of trees and wildlife into design plans as well as architectural standards. The urban forest incorporates all trees within the urban and surrounding space, and large scale construction ought to unify green infrastructure with the grey infrastructure to make best use of both.

Forest hubs need linkages a minimum of 1,100 feet wide to guide large animals safely around the city to access water sources, follow historic and climate driven migration patterns, and find protection during wildfire. Buffering fragmentation of forest edges will improve conditions for inner-forest habitants. Creating stepping stones of pocket parks and corridors throughout the city will improve bird habitat, which in turn will reduce tree pests. Large scale hub designation will offer inner city sanctuary. In this way, smaller animals can live safely within the growing city. These hubs are not manicured parks, but rather open natural spaces that will additionally provide the permeable surface for stormwater infiltration.

Because wind most often comes between the mountain ranges from the southwest, Santa Fe is uniquely positioned to plant trees which will provide moisture up-wind and into the city. This rainfall could then provide soil moisture which will continue this cycle by supporting tree growth down-stream. Growing green space within the southern portion of the city additionally addresses the needs of citizens who would like to create a sense of place along the Airport Road corridor (Lewin 2019). This includes having 10-foot sidewalks for passing pedestrians on trails off of the main road which connect larger open spaces. Utilizing green infrastructure protocol will help grow the urban canopy. This canopy and these corridors will develop a place for community connection and culture creation.

Santa Fe needs to plant hundreds of trees per year, guide stormwater to these and existing trees and provide standards to allow for trees to have 1,500 cubic feet of non-compacted soil for root growth. Mulch and compost need to be utilized to build soil food webs and hold moisture within soil. These are available and are desperately needed in every park that has been inventoried. Curb cuts allow water to enter permeable medians and open spaces.

Visioning for a future livability incorporates the needs of citizens and animal life. New urbanism is one that unifies with the native environment, incorporates local based plant selections and provides refuge for plants and animals under threat from the unpredictable future climate. It is one that safeguards precious water resources and values trees as suppliers of inland moisture.



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