

**Nepenthe Association  
Ad-hoc Grounds Vision Committee  
Vision Document  
December 3, 2014**

## Table of Contents

	Page
Executive summary	3
Background	5
Why a vision?	7
Vision statement	8
Mission statement	9
Realizing the vision	10
How will our operating budget and reserves be impacted by realizing this vision? What are the tradeoffs?	12
How much time will it take to realize this vision?	14
What will be the impact on property values?	15
Exhibits:	
A: Spreadsheets showing projected costs	
A-1: 2014 Reserve study for grounds	
A-2: Proposed methodology for reserve study irrigation, landscape and tree reserve Amounts	
A-3: Proposed 2015 Reserve study for grounds	
A-4: Approximate grounds-related costs 2010-2014	
A-5: Existing annual landscape water use estimate	
B: Other suggestions	
C: Record of brainstorming sessions late 2013 and early 2014	
D: Record of March 22, 2014 forum	

## Executive Summary

**BACKGROUND:** In 2013 the Board of Directors formed the ad hoc Grounds Vision Committee to produce a long term vision for the Grounds, and to recommend standards and practices for grounds activities.

Two homeowner brainstorming sessions and a Master Grounds Vision Forum were held to learn what homeowners saw as our highest priorities for the future. The top four priorities identified were:

1. Enhance landscape beauty,
2. Reduce water use,
3. Reduce maintenance and replacement costs, and
4. Improve safety.

Much of the landscape is in need of repair or replacement, and reserves may not be adequate. Now is the time to take a long view.

Sacramento's flat rate water charges currently are quite low, but are expected to increase drastically with the advent of water meters. Availability of irrigation water is expected to be reduced. This makes it necessary to utilize irrigation water more effectively.

**WHY A VISION?** Our association has to make decisions today in order to achieve the grounds vision that we describe for the future. Few doubt that water will become more costly and possibly rationed. Plants age and need to be replaced. Consistent funding needs to be available. The numbers presented are based on considerations of future needs.

**VISION STATEMENT:** The Nepenthe residential community has a well-earned reputation as one of the premier places of serenity and beauty within an urban forest in the Sacramento area. The association makes a number of commitments for policies to maintain and enhance this environment for current and future residents.

**MISSION STATEMENT SUMMARY:** A summary of our landscape mission is to enrich the lives of Nepenthe residents and maintain property values.

**REALIZING THE VISION:** Actions by the association are listed which need to happen, in order to

1. Keep our grounds beautiful,
2. Reduce water use and associated costs,
3. Reduce maintenance costs, and
- 3 4. Improve safety.

**HOW WILL BUDGETS BE IMPACTED? WHAT ARE THE TRADEOFFS?** Funding of actions called for in this Vision would require either installments over several years, or a one-time assessment. The installments over several years method was selected as the

---

most likely to succeed. A revision in the landscape-related portion of the Reserve Study budget was proposed to provide installment Reserve funding, and is being implemented. These establish a logical and consistent basis for funding landscape-related capital improvements and replacements over a number of years. This would avoid a special assessment and make sure new plantings work as planned before they are extended community-wide. Property values will be preserved or increased by the actions called for in this Vision, and failing to invest in the grounds would negatively affect property values.

## Background

In 2013 the Board of Directors formed the Ad-hoc Grounds Vision Committee and assigned it two large projects:

1. Produce and recommend a long-term Vision for our grounds.
2. Recommend standards and practices for the grounds

We began our work with brainstorming sessions in November 2013 and February 2014 to learn what is important to homeowners. Then on March 22 through a six-hour Master Grounds Vision Forum, to which all homeowners were invited, we learned what the participants saw as our highest priorities for the future. The top four priorities identified were:

1. Enhance landscape beauty.
2. Reduce water use.
3. Reduce maintenance and replacement costs.
4. Improve safety.

This vision is written in accordance with what we learned from the participating homeowners.

Our association is over forty years old. For that reason, much of our irrigation equipment, hardscape and plants are in need of repair or replacement. The questions arise: what will replace them, and when will we do the replacements? Existing reserves are not adequate for future landscape replacement. Now is the time to take a long view. The Nepenthe Board is reviewing proposed changes in landscape-related reserves which will address this situation.

There is broad consensus among the homeownership that Nepenthe is a beautiful place to live. We take pride in keeping it that way. The appearance of our grounds helps keep the values of our residences high. We are known for our trees and greenery.

The trees are an asset and part of the infrastructure. They provide many benefits ranging from shade, to air quality, to storm water interception. The area around the trees that is kept open allows ground water recharge. The trees increase the value of the property, and the natural feel provides residents with a sense of calm.

While the first impression of the Nepenthe grounds is very positive, a closer look is much less so. There are examples in many places of where we can do better. In the past trees have been removed for good reasons, but in some cases sufficient thought was not given to what would replace them. As shrubs age, many become woody and ugly, most noticeably after pruning.

### 5

Underlying these problems are deficiencies in landscape vendor performance. While we expect contract administration to improve as standards and practices become effective, there is no regular process to appraise contractor performance and few consequences follow when contractors fail to perform.

---

Many homeowners would like to select plants near their residences, but to date there is no mechanism to allow such action.

Today our water is virtually free -- \$5,200 per year and 0.5 percent of our operating budget, for all our grounds. There are no meters, but we all know they will be coming, together with a large increase in our water bills. The vast majority of climate scientists forecast drier weather and decreased water supply, while demographers predict an ever-greater state population. We need to act now to minimize the effects of costlier water and possibly reduced supplies. Among the plants we have, turf requires by far the most water, and it is our predominant ground cover. We continue to rely on sprinklers for irrigation, yet more effective means are now available. Often a single valve supplies grass, shrubs and trees – plants with very different water needs. What is more, irrigation equipment is not monitored regularly, so much water is wasted.

The cost of maintaining grounds is significant. The current year operating budget for landscaping is \$339,276 – 27 percent of total operating expenses, and \$47.92 per month per residence. Major components of the cost are frequent mowing and edging of turf, pruning of shrubs, maintenance of irrigation equipment and hardscape repair and replacement.

Nepenthe residents are concerned for their safety. Improvements in this area are possible via landscape design and maintenance. Tall shrubs provide hiding places for criminals. Lighting is generally good, but there is much room for improvement. Despite regular sidewalk repair, some trip hazards remain. Many of our residents have difficulty walking, yet we have few places for them to sit and rest.

## Why a Vision?

While this Vision document takes us well into the future, our association has to make decisions today so we get to the Nepenthe grounds we describe in this document. We can make decisions piecemeal, or we can make them taking into consideration the vision of where we want to be. This Vision gives guidance not only for decisions in the future but also for right now.

Few doubt that water will become more costly and possibly rationed as California gets drier and its population continues to grow. When that happens we don't want to be behind the curve. We will spend much less money and volunteer time if we anticipate changes related to water.

As plants age and need to be replaced, the question always arises: replaced with what? This Vision, and the standards and practices our committee is writing, give guidance for new plants that will increase safety, use less water and require less labor to maintain. What we plant will drive future irrigation equipment.

It is imperative that we protect a healthy tree canopy which not only absorbs dirt, filters the air and removes pollutants, but also cools the air and reduces noise pollution.

We all know how important the annual reserve study is for providing consistent funding over time. While the experts we employ bring critically needed expertise, in the area of landscape they rely on us to tell them what kind of landscape we want, how improvements will be phased over time, and how all this affects the costs of improvements. This Vision gives them much more specific information than they are getting now.

The same applies to the operation budget. Some costs will increase, but to some extent they will be offset by cost reductions.

It is human nature to assume the future will be very much like the recent past, but experience tells us that is rarely true. Accordingly the numbers we present are not simply extrapolations from the past; rather they are based on detailed consideration of our future needs.

## Vision Statement

The Nepenthe residential community has a well-earned reputation as one of the premier places of serenity and beauty within an urban forest in the Sacramento area. It is the forest of trees, shrubs and green space that allows the residents and guests of the community to have a sense of safety, an opportunity to walk paths and streets surrounded by beautiful well-lit landscaped areas and places to rest, and to know that the environment surrounding their homes is being well cared for and the values of their homes are being protected.

It is the vision of Nepenthe to maintain and enhance this environment for current and future residents. To achieve this vision the Association makes the following commitment:

- Create an open, transparent system of communication among the Board of Directors, management, the Grounds Committee and homeowners regarding the maintenance and improvement of the landscape.
- Recognize that water will be more expensive and less available than in the past and that landscape must be designed to survive with limited water without compromising the esthetics of the community. Drought tolerant shrubs and ground cover will replace some large areas of turf.
- Employ expert advice in the service of developing overall planning, utilizing new technologies, plant selection and water conservation. This includes a landscape architect, an arborist and a water conservation expert.
- Develop a proactive procedure so when it becomes necessary to remove a tree, a plan is in place well before the tree is removed. New plantings will reflect the concept of “right tree in the right place”. Establish a plan for the placement and maintenance of shrubs, ground cover and hardscape.
- The design of entry signs, alley address signs, parking signs, mailboxes and lights will be tasteful, have a unified look and complement the beauty of our community. Establish a schedule for their maintenance.
- Develop written standards and practices to improve our planning and to provide clear guidance to management and contractors. Use those standards when selecting contractors and evaluating their performance.
- Improve safety by maintaining walks, providing adequate lighting, providing places to contemplate and rest, and eliminating hiding places by planting lower shrubs.

## **Mission Statement**

Our landscape mission is to enrich the lives of Nepenthe residents and maintain property values through efficient management, commitment to landscape/environmental stewardship, and development of innovative solutions to address current and future challenges.

## Realizing the Vision

### WHAT NEEDS TO HAPPEN IN ORDER TO:

#### Keep our grounds beautiful?

- Develop mechanisms to ensure landscape contractors are 'on the same page' as the Board, the Manager, consultants and the Grounds Committee.
- Vendor contracts must incorporate standards and practices adopted by the Board, and include sanctions in the event of unsatisfactory performance.
- Continue developing and updating standards and practices for grounds activities.
- Increase homeowner involvement in grounds planting decisions, such as by having a policy that allows controlled planting by homeowners in common areas near their homes. Give greater recognition to homeowner concerns over tree removals by increasing the information given on reasons for removals.
- Have an ongoing program of tree planting in order to reduce the impact of tree removals.
- Have an ongoing program of replacing unattractive, woody shrubs with new, smaller and more attractive species that require less pruning.
- Provide sustainable, ongoing funding for necessary grounds renovation. Update reserve study landscape allocations to realistically show annual costs.
- Utilize consulting arborists, landscape architects or other experts when additional expertise is needed.
- Contract with a landscape architect/designer sensitive to the unique environment and the urban forest in Nepenthe. Create a data base for landscape renovation based on input from homeowners, Grounds Committee, Manager, vendors, consultants and Board of Directors. This would include suggested plant lists for full sun, full shade, and partial sun/shade and sample planting plans that the Association can use as needed when considering areas for renovation. Also, give suggestions on landscape features such as lighting and benches.

#### Reduce water use and associated costs?

- Reduce the area of spray irrigated turf, particularly in large open space areas, and develop alternate plantings that require less water.
  - Convert shrub spray irrigation to drip irrigation over an extended but defined period.
  - Provide separately-controlled irrigation or other irrigation strategies for trees that recognizes their need for deep, infrequent irrigation to produce deep, strong roots.
  - Install mulch around trees and shrubs to reduce water loss.
  - Maximize shade to reduce summer temperatures and reduce irrigation needs.
  - 10 • Replace wasteful spray heads with newer types that waste less water by reducing runoff.
  - Stay on top of leaks and missing heads by making repairs without delay. Make flags available to homeowners to mark needed irrigation repair locations.
-

### Reduce maintenance costs?

- Convert shrub spray irrigation along building foundations and fences to drip irrigation in order to eliminate spray hitting siding and fencing, causing dry rot.
- Replace shrubs that require frequent pruning with lower-growing varieties that require less pruning.
- Start a program of encouraging and assisting homeowners to convert patio irrigation to drip irrigation in order to eliminate spray hitting siding and fencing inside patio fences, pointing out the potential homeowner water cost savings which will accrue when metered.
- Require landscape and tree service vendors to follow standards and practices adopted by the Board.
- Review cost-effectiveness of proposed vendor contracts, and management's administration of vendor contracts and expenditures.
- Eliminate small areas of turf which are costly to maintain and have limited landscape value.

### Improve safety?

- Trim shrubs and vegetation in the vicinity of globe lights so that light reaches walkways more uniformly and without shadows.
- Add or relocate globe lights to eliminate shadows.
- Replace globe light fixtures with "dark sky" fixtures to eliminate blinding glare and unwanted light intrusion.
- Eliminate hiding places by planting lower shrubs.
- Require landscape vendor to keep shrubs trimmed for safety.
- Implement the relevant recommendations of *Crime Prevention through Environmental Design*.
- Continue the program of eliminating trip hazards on walkways and sidewalks.
- Provide benches or other resting places along walkways to increase walking safety. Place and orient benches to enhance surveillance.
- Encourage programs such as Neighborhood Watch and Nextdoor so that a culture of mutual aid is developed.
- Build resident awareness of disease vectors such as mosquitoes and infected birds and how to control them. Publicize the Sacramento-Yolo Mosquito and Vector Control District. <http://www.fightthebite.net/> .
- Add features at our perimeter to reinforce the message that an intruder is entering private property.
- Replace brick walls with fences which are more difficult to scale.

## **How will our operating budget and reserves be impacted by realizing this vision? What are the tradeoffs?**

The previous section described what needs to happen in order to achieve our Vision. Implementation of most of these items would require either the setting aside of additional funds each year in the reserve study budget to accomplish the actions in installments over several years, or a one-time assessment to complete these actions in perhaps two or three years. The Committee has elected to analyze the installment scenario as the most likely to be implemented. This also has the advantage of being able to test plant species and procedures on a smaller scale so that an unfortunate selection is not repeated everywhere.

The ad hoc Grounds Vision Committee has reviewed landscape-related items in the existing 2014 reserve study budget. It found that a significant sum was budgeted for landscape renovation during years 2013 through 2016, but nothing in years beyond 2016. It found that existing expense categories were inadequate to properly track landscape-related expenses. It found that there was no provision for setting aside reserves for tree removal or for repair/replacement of irrigation automation items or for water conservation changes. (Exhibit A-1)

As a result of this review, the Committee prepared a proposed revision of the landscape-related portion of the reserve study which addresses these issues. Two line items were added for irrigation, one for repair and replacement of the automated irrigation system, and a second to provide for modification of this system for water conservation. For landscape renovation and replacement, line items were added for renewal of shrubs, ground cover and turf, to continue for the duration of the reserve study rather than ending in 2016. Line items were added for both tree removal and tree replacement. Tree trimming was shown as a separate line item. (Exhibits A-2 & A-3)

The amount to be set aside in reserves annually for each item was estimated by dividing its capital cost by its assumed useful life. Amounts for subsequent years were inflated by 2.5%, the same as in the existing reserve study.

The automated irrigation controllers, valves and wiring cost approximately \$500,000. Their useful life was estimated at 25 years, so the beginning annual reserve for upkeep and replacement would be \$20,000. An amount of \$15,000 per year was added on a separate line for water conservation modifications to the system such as drip systems and separate irrigation for trees.

Based on a few sample units, it was estimated that there were an average of 50 shrubs per unit. Replacing these shrubs over a 25 year period at \$40 each would require \$47,200 per year. A contingency of 12% or \$5,664 per year was added on a separate line due to the uncertainty of shrub costs. It was estimated that 20 flats per year of ground cover at \$40 each would be needed, with a 25 year life, requiring \$1888 per year. It was estimated that turf reseeding of 1,000 square feet per unit at 30 cents per square foot would be needed, with a 25 year life, requiring \$7080 per year.

---

Based on the tree inventory, there are approximately 2,000 trees in Nepenthe. Tree removal of mature trees has averaged about \$1,300 each. If most trees have a 40 year life, \$65,000 per year should be set aside for this purpose. Remediation of removal sites is estimated to be about \$700 each. With the same 40-year life, \$35,000 per year should be set aside for this purpose. A 12 % contingency (based on removal plus remediation) was added to deal with unforeseen events such as severe storms. Assuming that 75 percent of removals should be replaced at a cost of \$90 each, (with replacement trees obtained free from the Sacramento Tree Foundation), \$3,375 per year would be needed. Annual tree trimming costs were estimated based upon tree trimming proposals from Valley Crest for 2014 and 2015.

The bottom line impact of this proposed revision is that for years 2014, 2015 and 2016, the amounts needed to be set aside in landscape-related reserves DECREASED by \$93,362, \$72,694 and \$103,459 respectively. In years 2017 and beyond, the amount needed would INCREASE by approximately \$100,000. A portion of the 2014 budget has been spent at this time.

A grounds-related reserve item that is in the reserve study but not in the landscape section is the reserve for lighting. The existing reserve study contains a line item for ongoing replacement of 8 % of lights each year (approximately 32 lights). This amount was \$26,896 for 2014. Implementation of lighting improvements suggested in the *Crime Prevention through Environmental Design Audit* by the Sacramento Police Department will likely require an increase in this amount, but there is no information on cost at this time.

Another grounds-related item that is in the reserve study but not in the landscape section is a reserve for repair and replacement of underground wet utilities. This includes the sewers, storm drains and domestic water lines in Nepenthe not maintained by the City of Sacramento. The amount was \$27,199 for 2014. In order to make estimates of capital and replacement costs for these utilities it will be necessary to map them and check their current condition.

## How much time will it take to realize this Vision?

We are recommending the changes required to realize this vision be made over a series of years for two reasons: to avoid a special assessment, and to make sure new plantings work as planned before they are extended community-wide. For details see the previous section entitled, **How will our operating budget and reserves be impacted by realizing this vision? What are the tradeoffs?**

Some changes are already underway. Examples are water conservation measures, shrub replacement and irrigation improvements. As can be seen in Exhibit A-3, other changes will occur in the years ahead. This is particularly true of long-lived assets such as trees, shrubs and irrigation systems. In general some assets will be replaced as they come to the ends of their useful lives. But some shrubs and ground cover will be replaced earlier in order to realize the benefits of lower maintenance, less water use and increased safety.

## **What will be the impact on property values?**

We believe that the actions called for in this Vision will preserve and perhaps increase property values as measured in constant dollars. To the extent grounds enhancements make our neighborhood more attractive, there will be a beneficial effect on values.

Conversely, failing to invest in the grounds would negatively affect property values.

However, increased assessments can also have a negative effect on property values.

We believe realtors who know Nepenthe understand that while our dues are substantial, the benefits we offer are greater than elsewhere, and discriminating buyers will continue to understand that.

While some increased spending will be offset by lower maintenance costs, there is no getting around the water cost problem. Water will cost more in the future for our homeowners, and also for all other homeowners associations with whom we compete for buyers. By investing in water conservation now, we will lessen the financial impact.

# A-1: 2014 RESERVE STUDY FOR GROUNDS

Current Life  
Replacement Useful /

Nepenthe Association (General Reserve)  
30 Year Expense Forecast - Detailed  
Adopted by the Board of Directors 9/25/13  
Prepared for the 2014 Fiscal Year

Reserve Component	Cost Remaining	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
350 - Asphalt Overlay 32,877 Sq. Ft. Zone 7 - Continued University	101,097	15	5													
<b>Total 01000 - Paving</b>	<b>1,122,707</b>			<b>65,936</b>	<b>17,130</b>	<b>401,813</b>	<b>197,115</b>									

<b>02000 - Concrete</b>																
200 - Sidewalks, Curbs & Gutters 59,816 Sq. Ft. Public Streets- On-going (0.8%)	9,508	1	0	9,508	9,745	9,989	10,239	10,495	10,757	11,026	11,302	11,584	11,874	12,171	12,475	12,787
220 - Walkways Common Area Interior Walkways- On-going	40,251	1	1	41,258	42,289	43,346	44,430	45,541	46,679	47,846	49,042	50,268	51,525	52,813	54,134	55,487
302 - Driveways 51,477 Sq. Ft. Garage and Alley Aprons (2%)	11,872	1	0	11,872	12,169	12,473	12,785	13,104	13,432	13,768	14,112	14,465	14,826	15,197	15,577	15,966
<b>Total 02000 - Concrete</b>	<b>61,631</b>			<b>21,380</b>	<b>63,172</b>	<b>64,751</b>	<b>66,370</b>	<b>68,029</b>	<b>69,730</b>	<b>71,473</b>	<b>73,260</b>	<b>75,091</b>	<b>76,969</b>	<b>78,893</b>	<b>80,865</b>	<b>82,887</b>

<b>04000 - Structural Repairs</b>																
550 - Bridge Maintenance Zone 1 Common Area	2,563	22	0	2,563												
<b>Total 04000 - Structural Repairs</b>	<b>2,563</b>			<b>2,563</b>												

<b>18000 - Landscaping</b>																
100 - Irrigation: Misc. Sprinkler Repairs- Funded Annually	33,115	1	0	33,115	33,943	34,791	35,661	36,552	37,466	38,403	39,363	40,347	41,356	42,390	43,449	44,536
420 - General Repairs/Upgrades Unanticipated Maintenance	16,153	1	3		17,395	17,830	18,276	18,733	19,201	19,681	20,173	20,678	21,195	21,724	22,268	22,824
450 - Drainage System Maint. Landscape & French Drains	4,464	1	0	4,464	4,575	4,690	4,807	4,927	5,050	5,177	5,306	5,439	5,575	5,714	5,857	6,003
461 - General Repairs/Upgrades Major Rehab Over 5 Years (2-2)	87,520	40	0	87,520												
462 - General Repairs/Upgrades Major Rehab Over 5 Years (2-3)	94,395	40	0	94,395												
466 - General Repairs/Upgrades Major Rehab Over 5 Years (2-6)	87,360	40	0	87,360												
467 - General Repairs/Upgrades Major Rehab Over 5 Years (7) pd in 2012	37,395	40	39													
468 - General Repairs/Upgrades Major Rehab Over 5 Years (Rem. From 2009)	180,241	40	0	180,241												
472 - General Repairs/Upgrades Major Rehab Over 5 Years (Rem. Excess from 2009)	180,241	40	1	184,747												
476 - General Repairs/Upgrades Major Rehab Over 5 Years (Rem. Excess from 2009)	180,241	40	2	189,366												
480 - General Repairs/Upgrades Major Rehab Over 5 Years (Rem. Excess from 2009)	180,241	40	3	194,100												
500 - Tree Maintenance Replacement & Replanting Only	46,841	1	1	48,012	49,213	50,443	51,704	52,997	54,322	55,680	57,072	58,498	59,961	61,460	62,996	64,571
511 - Tree Maintenance 2013 Only (nr:1)	31,571	1	0	31,571												
520 - Tree Maintenance Trimming- Ongoing	82,000	1	0	82,000	84,050	86,151	88,305	90,513	92,775	95,095	97,472	99,909	102,407	104,967	107,591	110,281
<b>Total 18000 - Landscaping</b>	<b>1,241,778</b>			<b>600,665</b>	<b>355,327</b>	<b>364,210</b>	<b>390,711</b>	<b>201,527</b>	<b>206,565</b>	<b>211,729</b>	<b>217,022</b>	<b>222,448</b>	<b>228,009</b>	<b>233,709</b>	<b>239,552</b>	<b>245,541</b>

EXHIBIT A-2

PROPOSED METHODOLOGY FOR RESERVE STUDY, IRRIGATION, LANDSCAPE AND TREE RESERVE STUDY

See page 17 of 2014 Reserve Study for existing reserve amounts														10/7/2014	IFG	
2014 Thru 2028 shown on this page																
	Current	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Repl Cost															
<b>Irrigation Automation, Proposed Reserve Study Amounts</b>																
	Assume: Total automation cost, 7 zones @					500,000			25	Year Life	20,000	Per Year starting 2014		2.5% Inflation per Year		
	Water cons	Begin to separately drip irrigate shrubs & trees @				15,000	Per Year	Starting 2014								
Automation	500,000	20,000	20,500	21,013	21,538	22,076	22,628	23,194	23,774	24,368	24,977	25,602	26,242	26,898	27,570	28,259
Water Cons	NA	0	15,000	15,375	15,759	16,153	16,557	16,971	17,395	17,830	18,276	18,733	19,201	19,681	20,173	20,678
TOTAL	500,000	20,000	35,500	36,388	37,297	38,230	39,185	40,165	41,169	42,198	43,253	44,335	45,443	46,579	47,744	48,937
<b>Landscape Shrub/Ground Cover Renovation &amp; Replacement, Proposed Reserve Study Amounts</b>																
	Assume: 50 shrubs/unit x 590 = 29,500 shrubs @					40	1,180,000		25	Year Life	47,200	Per year				
	Contingency allow % on shrubs @				12	141,600		25	Year Life	5,664	Per year					
	20 flats GC/unit x 590 = 1180 flats @					40	47,200		25	Year Life	1,888	Per year				
	Turf reseed 1000sf/unit x 590 = 590,000 sf @					0.3	177,000		25	Year Life	7,080	Per year				
Shrubs	1,180,000	47,200	48,380	49,590	50,829	52,100	53,402	54,738	56,106	57,509	58,946	60,420	61,930	63,479	65,066	66,692
Contingency	141,600	5,664	5,806	5,951	6,100	6,252	6,408	6,569	6,733	6,901	7,074	7,250	7,432	7,617	7,808	8,003
Gr Cover	47,200	1,888	1,935	1,984	2,033	2,084	2,136	2,190	2,244	2,300	2,358	2,417	2,477	2,539	2,603	2,668
Turf reseed	177,000	7,080	7,257	7,438	7,624	7,815	8,010	8,211	8,416	8,626	8,842	9,063	9,290	9,522	9,760	10,004
TOTAL	1,545,800	61,832	63,378	64,962	66,586	68,251	69,957	71,706	73,499	75,336	77,220	79,150	81,129	83,157	85,236	87,367
<b>Tree Replacement/Replanting, Proposed Reserve Study Amounts</b>																
	Assume: 2000 trees, average cost to remove					1300	2,600,000		40	Year Life	65,000	Per year				
	Average cost to remediate					700	1,400,000		40	Year Life	35,000	Per year				
	75% replacement, 1500 trees & irrig bubbler @					90	135,000		40	Year Life	3,375	Per year				
	5 gallon trees free from Sac Tree Foundation, otherwise add tree purchase cost to replacement cos															
	Contingency allow % on tree remove/remed					12	480,000		40	Year Life	12000	Per year				
Remove/R	2,600,000	65,000	66,625	68,291	69,998	71,748	73,542	75,380	77,265	79,196	81,176	83,205	85,286	87,418	89,603	91,843
Remediate	1,400,000	35,000	35,875	36,772	37,691	38,633	39,599	40,589	41,604	42,644	43,710	44,803	45,923	47,071	48,248	49,454
Replace	135,000	3,375	3,459	3,546	3,635	3,725	3,819	3,914	4,012	4,112	4,215	4,320	4,428	4,539	4,652	4,769
Contingency	480,000	12,000	12,300	12,608	12,923	13,246	13,577	13,916	14,264	14,621	14,986	15,361	15,745	16,139	16,542	16,956
TOTAL	4,615,000	115,375	118,259	121,216	124,246	127,352	130,536	133,800	137,145	140,573	144,088	147,690	151,382	155,167	159,046	163,022
<b>Tree Trimming, Proposed Reserve Study Amounts</b>																
	NA	66,174	75,830	66,174	75,830	70,000	71,750	73,544	75,382	77,267	79,199	81,179	83,208	85,288	87,420	89,606
Valleycrest proposal amounts used for years 2014 & 2015																
<b>TOTAL PROPOSED RESERVE STUDY AMOUNTS FOR 18000, LANDSCAPING</b>																
	6,660,800	263,381	292,967	288,740	303,960	303,833	311,429	319,215	327,195	335,375	343,759	352,353	361,162	370,191	379,446	388,932
<b>EXISTING RESERVE STUDY AMOUNTS FOR 18000 LANDSCAPING</b>																
2013 Update																
	1,241,778	355,327	364,210	390,711	201,527	206,565	211,729	217,027	222,448	228,009	233,709	239,552	245,541	251,679	257,971	264,420
<b>INCREASE OR DECREASE FROM EXISTING</b>																
	5,419,022	(91,946)	(71,243)	(101,971)	102,433	97,268	99,700	102,188	104,747	107,366	110,050	112,801	115,621	118,512	121,475	124,512



# A-3: PROPOSED 2015 RESERVE STUDY FOR GROUNDS PAGE 2 OF 2

Current Life  
Replacement Useful /

2014 Update - 2  
Prepared for the 2015 Fiscal Year

Reserve Component	Cost	Remaining	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
110 - Irrigation: Misc.	15,000	1	1	15,375	15,759	16,153	16,557	16,971	17,395	17,830	18,276	18,733	19,201	19,681	20,173	20,678	21,195
Water Conservation																	
120 - Shrubs	47,200	1	0	47,200	48,380	49,590	50,829	52,100	53,402	54,738	56,106	57,509	58,946	60,420	61,930	63,479	65,066
Shrubs																	
130 - Irrigation: Misc.	5,664	1	0	5,664	5,806	5,951	6,100	6,252	6,408	6,569	6,733	6,901	7,074	7,250	7,432	7,617	7,808
Shrubs Contingency																	
140 - Miscellaneous	1,888	1	0	1,888	1,935	1,984	2,033	2,084	2,136	2,190	2,244	2,300	2,358	2,417	2,477	2,539	2,603
Ground Cover																	
150 - Irrigation: Misc.	5,664	1	0	5,664	5,806	5,951	6,100	6,252	6,408	6,569	6,733	6,901	7,074	7,250	7,432	7,617	7,808
Turf & Re-seed																	
160 - Tree Maintenance	100,000	1	0	100,000	102,500	105,053	107,689	110,381	113,141	115,969	118,869	121,840	124,886	128,008	131,209	134,489	137,851
Removals																	
170 - Tree Maintenance	3,375	1	0	3,375	3,459	3,546	3,635	3,725	3,819	3,914	4,012	4,112	4,215	4,320	4,428	4,539	4,652
Replace																	
174 - Tree Maintenance	12,000	1	0	12,000	12,300	12,608	12,923	13,246	13,577	13,916	14,264	14,621	14,986	15,361	15,745	16,139	16,542
Contingency																	
180 - Tree Maintenance	66,174	1	0	66,174	67,828	69,524	71,262	73,044	74,870	76,742	78,660	80,627	82,642	84,708	86,826	88,997	91,222
Trimming																	
421 - General Repairs/Upgrades	1,645	1	0	1,645													
2014 Only[yr:1]																	
521 - Tree Maintenance	58,076	1	0	58,076													
Trimming (2014 Only)[yr:1]																	
Total 18000 - Landscaping	342,261			327,361	283,889	290,986	298,261	305,718	313,360	321,194	329,224	337,455	345,891	354,539	363,402	372,487	381,799
19000 - Fencing	12,607	25	22														
140 - Miscellaneous																	
Storage Lot New Fence																	
Total 19000 - Fencing	12,607																
20000 - Lighting	26,896	1	1	27,568	28,258	28,964	29,688	30,430	31,191	31,971	32,770	33,589	34,429	35,290	36,172	37,076	38,003
100 - Exterior: Misc. Fixtures																	
400 Total- On-going Repl ea Yr of approx 32 (8%)																	
101 - Exterior: Misc. Fixtures	13,368	1	0	13,368													
2014 Only[yr:1]																	
Total 20000 - Lighting	40,264			13,368	27,568	28,258	28,964	29,688	30,430	31,191	31,971	32,770	33,589	34,429	35,290	36,172	37,076
21000 - Signage	10,506	15	10														
200 - Street Signs																	
Alley Signage																	
712 - Lollipop	3,572	15	10														
34 Speed Limit Signage Inserts																	
Total 21000 - Signage	14,078																
30000 - Miscellaneous	27,199	1	1	27,879	28,576	29,290	30,023	30,773	31,543	32,331	33,139	33,968	34,817	35,687	36,580	37,494	38,432
992 - Utilities																	
Underground																	
993 - Utilities	19,205	10	3														
Storm Drains Connection Cleaning																	
995 - Utilities	17,900	1	0	17,900													
2014 Only[yr:1]																	
997 - Utilities	525	1	0	525													
2014 Only[yr:1]																	
Total 30000 - Miscellaneous	64,829			18,425	27,879	28,576	29,290	30,023	30,773	31,543	32,331	33,139	33,968	34,817	35,687	36,580	37,494
Total [Grounds] Expenditures Inflated @ 2.50%	401,559	469,055	430,328	444,209	835,929	444,969	456,093	664,611	479,183	491,162	521,463	516,027	1,551,698	568,626	555,205		

<b>EXHIBIT A-4 APPROXIMATE GROUNDS-RELATED COSTS 2013 &amp; 2014</b>					
	Account	Op or	Spent	2014	Spent
	Number	Res	During	Budget	YTD
			2013	Amount	Aug-14
Landscape Contract	15500	OP	303,660	308,916	202,440
Plant Material Replacement	15502	OP	18,592	12,000	11,437
Landscape Supplies	15503	OP	2,544	5,160	4,763
General Landscape Upgrade	N23142	RES	22,729	184,127	67,327
Grounds Reserve (Note 1)	N23275	RES	1,150	274,646	37,028
Sprinkler Repair	15505	OP	20,815	4,800	20,731
Ongoing Irrig. Repair	N23141	RES	22,426	33,943	5,682
Irrig. Retrofit Zone 2	N23133	RES	94,020	0	0
Irrig. Retrofit Zone 3	N23134	RES	94,395	0	0
Irrig. Retrofit Zone 6	N23140	RES	92,505	0	0
Irrigation Water Bill (Note 2)	15106	OP	5,443	5,316	27,109
Tree Maintenance	15504	OP	8,375	8,400	7,657
Tree Pruning, Removals, Replacement	N23282	RES	119,784	75,652	1,195
Concrete Reserve (Note 3)	N23014	RES	31,908	19,172	780
Underground Utility Repairs	N22911	RES	10,283	24,293	14,425
Pole Light Repairs	N22991	RES	21,965	0	5,608
Note 1: Used as a catch-all account, including paving repair, concrete repair, etc.					
Note 2: Storm drain maintenance & street sweeping added to bill by city in 2014					
Note 3: Some walkway repairs in Grounds Reserve					

EXHIBIT A-5 EXISTING ANNUAL LANDSCAPE WATER USE ESTIMATE						11/17/2014
				Water Use	Water Use	Water Cost if
ASSUMPTIONS:	Annual Eto. inches		49.6	Inches/Year @	CF/Year	Metered @
	Irrigation Efficiency, percent		50	% Efficiency		\$ .996/100cf
		Acres	Square Ft			
TURF	1000sf/unit x 590 = 590,000sf					
	10ac open space = 435,600sf					
	Total	23.5	1,025,600			
				99.2	8,478,293	84,444
GROUND COVER	250sf/unit x 590 =147,500sf					
	12ac open space = 522,720sf					
	Total	15.4	670,220			
	at 60% of turf water use			59.5	3,324,291	33,110
SHRUBS/PERENNIALS	50 Shrubs/unit x 590 = 29,500 @10sf ea	6.8	295,000			
	at 60% of turf water use			59.5	1,463,200	14,573
TREES	2000 Trees at 100sf ea	4.6	200,000			
	at 60% of turf water use			59.5	992,000	9,880
	Totals				14,257,785	142,008
	Meter Monthly Charge x 85 X 12					24,888
	ANNUAL WATER COST IF METERED, \$					166,896

## **Exhibit B: Other suggestions**

In the course of our work we received ideas that could improve Nepenthe and its homeowners not directly related to the grounds. They follow:

- Protect air conditioning units from copper theft by securing copper components with countersunk screws instead of standard Phillips head and hexagonal head screws.
- Continue and expand Neighborhood Watch.
- Continue to use NextDoor to alert homeowners to security problems.
- Contract to map our Nepenthe-maintained underground utilities: storm drains, sanitary sewers, water lines and electrical lines.
- Contract to get an assessment of the condition of our Nepenthe-maintained sanitary sewers and storm drains. Start with some representative sample locations.



BRAIN STORM SESSION I  
October 29, 2013  
Dunbarton Cabana  
6 pm to 7 pm

Exhibit C: Record of Brainstorming  
Sessions Late 2013 and Early 2014

**What brought you to Nepenthe?**

- Urban forest (2<sup>nd</sup> largest urban forest in the US ,certified)
- Trees
- Greenbelts
- Design of Homes/Community
  - a. Developer's knowledge (Powell)
  - b. Rep for Clean and Green
  - c. Clubhouse
- Location
- Pet friendly
- Diverse Age Group (not a senior community)
- Beautiful
- Standard of maintenance
- Peace, calm, quiet, serene

**Concerns**

- Too many parked cars on public streets
- Trees (specific/select type that are pollen free)
- Street/Walkway lights are aging
- Replace a tree for a tree not necessarily in the same location
- Replace large canopy trees with similar type
- Consider tree growth, watering needs, life span

**Shrubs**

- Are shrubs a priority?
- Aging
- Trim/Remove at driveway for clearance and visibility
- Private unit design discourages neighbor interaction, need to encourage neighborly and community gatherings

**Wood Rogers Master Landscape Plan/Report**

- Costly
- Re-examine
- What was useful?  
Benches

**Vision**

- Establish a Master Grounds Program that embraces a sustained administrative and community commitment to the care and maintenance of our largest asset, the ground. We shall achieve this vision through program planning, funding, and program implementation over the next decade.

**Standards and Practices (in process)**

**Strategic Planning Desires/needs**

- Gathering Places-neighborhood potlucks, etc.

- More "parklets"
- Benches-focal points
- Walking opportunities
- More plant variety, color and seasonal plants
- Prioritize by project area and finalize projects in order
- Hire a Consulting Landscape Architect/arborist conditionally, as on call, full time/part time
- Supervision by Nepenthe
- Standards and Practices
- Simultaneous maintenance of existing landscape. Allow homeowners replace with approved plants
- Update plant binder
- Security considerations
- More alley lights
- Water Conservation vs turf watering needs, turf alternatives
- Water Meters in Nepenthe
- Areas with special needs ex. East Ranch is under power lines

### **Community Involvement and Communication**

- Survey homeowners to determine what they want
- On-going outreach
- Newsletters
- Small meetings-zone meetings, similar to neighborhood watch mths and alley chats
- On-line communication
- Mailbox Mailer/Flyer to all residents
- Survey questions
  - What's working?
  - What is not working?
  - What do you want?
  - What do you like?
- Facilitator-provides structure
- Make Wood Rodger Report Available

### **Open Space Planning**

- Options
- Professional staff for input
- Hard scape
- Community gardens
- Water conservation
- Drought planting
- Plant maintenance

### **Past Considerations**

- Lack of action and continuity by boards, committees and staff
- Lack of adequate funding for grounds

## BRAIN STORMING SESSION II

February 18, 2014

Nepenthe Clubhouse

6:00 pm to 7:00 pm

**What brought you to Nepenthe?**

- Animal friendly
- Trees
- Lawn/greenbelts
- Home re-sale value
- Nepenthe considered single family homes not townhouse/Condos
- Location
- Within city limits
- Diverse Age Group (Not exclusive 55+)
- Peaceful, quiet

**Concerns*****Safety***

- Better Lighting for paths, many areas too dark
- Location of security lights
- Repair lights
- Lack of patrol
- Mailbox vandalism (type and location)

***Landscape***

- Disparity in landscape maintenance between Nepenthe and Campus Commons, latter is better maintained
- Enforce rules re: landscape, planting
- 

***Land Use***

- Community Garden
- Bocce Ball

***Trees***

- Trees and pollen
- Replace trees removed
- Maintain a mix of trees such as shade/canopy and ornamental
- Need trees for traffic calming i.e. homes on Howe Ave
- No color plan for trees, shrubs and plants
- Prevention/treatment of Liquid Amber tree pods
- 

***Water Conservation***

- Long term costs for automation, drip and metering
- Drip system intensive maintenance
- UC Davis Arboretum has drought resistant plants
- Water early morning not late evening
- Correct water run-off caused by soil compaction
- Consider taller turf growth

**Vision for Nepenthe**

- Drought resistant plant material with a color palette for plants, shrubs, and trees
- Native species
- Natural look of plants and shrubs not square/round
- Replace turf with type on golf courses
- Uniformity and consistency of landscape in Nepenthe/all zones
- Develop long term plan

**Strategic Planning Desires/Needs**

- Benches
- Water Conservation Plan
- Better pruning expertise, blowing techniques, supervision of Nepenthe grounds
- Develop criteria for remediating/ re-landscaping selected areas
- Research types of turf for stark areas in Nepenthe
- Need more descriptive work orders include before and after photos
- Issue flags to home owners who report landscape problems in addition to e-mail or call to office
- Long term plan for grounds

**Community Involvement and Communication**

- Publish in newsletter/web zones and zone stewards
- Share ideas/articles
- Publish schedule of all trees to be removed, replanted
- Survey Monkey to determine what homeowners want
- March Homeowner Workshop -Facilitator to provide structure

**Future Considerations**

- Reserve funding
- Assessment
- 

Note: many of these topics could have been placed under the heading of concerns, but needs seem more urgent than concerns.

**EXHIBIT D: RECORD OF MARCH 22, 2014 FORUM**

NEPENTHE ASSOCIATION MASTER GROUNDS VISION COMMITTEE

# Report on Master Grounds Vision Forum

---

Held March 22, 2014

**Primary Author: Liza Tafoya**

**4/23/2014**

**Submitted by the Master Grounds Vision Ad Hoc Committee:**

Pamela Livingston, Chair

Ivan Gennis, Board Liaison  
Liza Tafoya  
Mike Notestine

## **Master Grounds Vision Committee Report**

On March 22, 2014, Kevin Wolf, urban forester, facilitated Nepenthe's Grounds Vision Workshop. The purpose of the workshop was to develop a vision for the Nepenthe grounds with homeowner input. The workshop generated valuable information that will guide development of a mission statement and strategic plan.

Kevin provided to the sixty residents in attendance a list of goals. After a group discussion, each resident participated in a goal setting exercise using ballots.

After selecting four priority goals, participants met in small groups to discuss and define the goals. Comments provided an overview of current landscape conditions, challenges and suggested improvements important to homeowners.

Each priority goal and related homeowner comments will be discussed separately. The four priority goals are:

- Goal 1: Enhance Landscape Beauty
- Goal 2: Reduce Water Use
- Goal 3: Reduce Maintenance and Replacement Costs
- Goal 4: Improve Safety

### **Group Discussion Points**

#### **Goal 1 - Enhance Landscape Beauty**

Central to landscape beauty- homeowners desired beauty for all Nepenthe. Homeowners were aware that homes on University Avenue needed attention. Homeowners emphasized use of color in landscape design, turf and tree management (controlling Liquidambar balls) weed control, using native plants and grasses, rock gardens and benches can contribute to landscape beauty. Some participants proposed allowing homeowners to plant in common areas from approved plant lists to enhance community well-being.

Participants supported a comprehensive maintenance program to clean up the landscape, walkways, mailboxes, signage, lights and alleys of junk mail and garbage cans.

Homeowners had strong views about experts and the landscape contractor. Experts and homeowners offer experience, knowledge, and innovative ideas to maintain beautiful grounds. Homeowners identified areas for improvement for the landscape contractor. Improvements included: better supervision and performance, train landscape crew, blowing method is

unacceptable, prune correctly, no edging with chemicals/weed killer, but instead mulch around trees. Homeowners recommended a comparison of the current landscape contractor with other landscape contractors in the community.

Participants commented that planning for the future was a monumental task. Homeowners promoted the following: develop policy to allow homeowners to plant in common areas, develop a comprehensive landscape plan which considers environmental, ecological and physical conditions and develop a systematic approach to tree replacement.

Homeowner comments were grouped in four areas of concern for Goal 1 as illustrated below.



## Goal 2 - Reduce Water Use

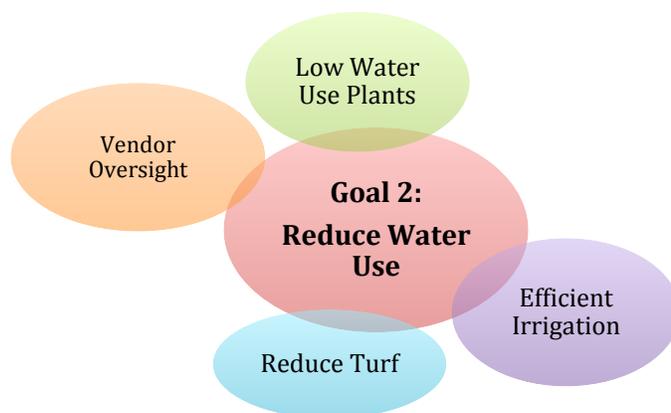
Homeowners are aware the community will face escalating costs of water and the installation of water meters in 2020 or by 2025. It is unknown how to accurately forecast future landscape conditions, water use and implications of water metering.

Homeowners were aware of the current water shortage throughout the state. To conserve water and optimize water use, homeowners endorsed low water and drought-tolerant plants, trees, and native grasses. Artificial turf was suggested as an option for turf reduction in small or specific areas. Homeowners gave ivy a no vote. Homeowners encouraged rock beds or rock gardens. Homeowners supported approval to plant in common areas.

Watering efficiently, reducing water demand and monitoring intensity of water dispensation throughout the community are water conservation strategies.

Homeowners preferred to take advantage of free services provided by consultants, manufacture representatives and other resources to evaluate water use practices in Nepenthe. It is a homeowner expectation that the current landscape contractor participate in the water conservation effort by removing dead plants, increasing landscape crew to maintain sprinklers, changing sprinkler heads to low flow or mist and reducing water run-off on sidewalks and structures.

Participants recommended developing a long-term plan that considers each landscape zone individually. Each zone maintains a unique set of requirements for trees, plants, shrubs, and grasses to thrive. Homeowners suggested updating the irrigation system, recycling water and installing wells or cisterns. Partnering with local agencies might mitigate current or future cost concerns.



### Goal 3 - Reduce Maintenance and Replacement Costs

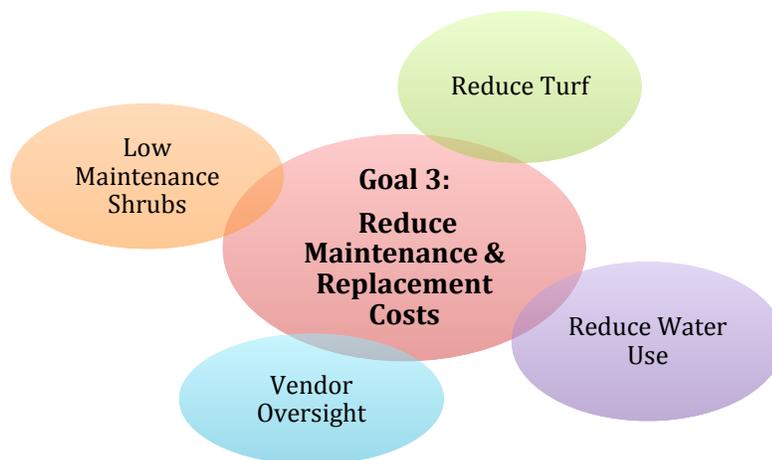
Homeowners have strived to maintain the value of homes and quality of the landscape in the community. How well we manage our community also defines the quality of Nepenthe landscape.

Homeowners provided options to reduce landscape maintenance: incorporate low-growth, low-water and drought tolerant plants, use drip in shrub beds, reduce turf, mulch and landscape with river rocks. A recurring theme, allow homeowners to improve common areas. Issue flags to homeowners for the purpose of marking landscape problems for the landscape contractor.

To reduce costs homeowners recommended reducing mowing and blowing in areas with little debris, removing dead plant material, reducing shrub replacements by hard pruning old shrubs, maintaining the irrigation system and standardizing maintenance and work order requests to five days completion time.

Many comments focused on employing experts to assist with automating the irrigation system and making careful selection of tree, shrubs, and turf replacement. Homeowners expressed need for a sound barrier for homes on Howe Avenue. Expectations for the landscape contractor included: develop consistent work crew for an area, supervise and train crew, use proper planting and pruning procedures and tune the sprinkler system. Management should ensure contract is clearly stated with clear scope of work and manage all contractors and vendors.

Homeowners focused on developing a master plan that includes maintenance, repair and replacement costs. Maintaining continuity of landscape design concerned homeowners. Homeowners supported expanding and clarifying line item entries in the reserve study for budget purposes. Participants encouraged an alliance with local government to mitigate implementing water conserving landscape costs.



## Goal 4 - Improve Safety

This goal provided homeowners with a snapshot of current safety conditions and effects of these conditions on individual and community well being.

Homeowner commented on the need for better lighting for walkways, alleys and dark areas in the community, periodic inspection of plants in front of windows. Homeowners commented on problems with tall hedges in community, shrubs at end of driveways scratch vehicles and interfere with visibility. Liquidambar balls strewn on sidewalks are hazardous to pedestrians. Participants suggested that homes on Howe Avenue need a sound wall. Mailbox safety is an issue with few solutions. Benches were mentioned in this goal, as they would allow homeowners to rest periodically allowing them to enjoy the community more safely.

Homeowners observed that maintenance is required for walkways, sidewalks, spacers at end of driveways and for roofs.

Participants remarked the landscape contractor tree trimming and shrub pruning was unsatisfactory from a safety point of view. Work order response time needs improvement. Homeowners recommended payment withhold until work is verified as completed.

Many recommended a photo of an open garage door be published in the newsletter as a reminder to homeowners of their shared responsibility to keep the community safe. Security contractor could enforce traffic speeds, report open garage doors to homeowners and issue citations to vehicles parked on levee and Dunbarton in no park zones.

Homeowners encouraged planning for additional locks on gates, security camera installation, bike lanes, and removing trip hazards.



## **Conclusion**

Homeowner participation in setting goals offered a useful framework for many resource management concerns and issues that are interwoven among priority goals. A vision will be developed followed by a mission statement and strategic plan based on information gathered from small group discussions.

Central to homeowner discussions were challenges of sustaining environmental and landscape quality, conserving and maintaining an urban forest community. Living in an urban forest where homeowners derive ecological, economic, and social benefits from its landscape and trees define why homeowners chose to live here. However, homeowners were aware long range planning and funding are key to maintaining the beauty of their community.

# BALLOT on Goals for the Grounds of the Nepenthe Community

For March 22, 2014 Meeting

**Directions:**

1. If any new goals are added at the meeting, write them in the empty space at the bottom of the ballot.
2. Any ballots with more than five votes will not be counted. Ballots with less than five votes will be accepted.
3. Only one ballot should be casted per person.

Put an X next to no more than 5	Goals in Alphabetical Order
9	Community gardens
	Edible landscaping
5	Energy Use
	Ground Water Recharge
	Habitat
1	Landscape Beauty
3	Maintenance and Replacement Costs
	Pest reduction
8	Pollution
	Public Health
	Recreation
4	Safety
7	Sense of Community
6	Turf Reduction
2	Water Use