

**MINUTES OF THE ANNUAL MEETING OF MEMBERS
OF
THE MONTEREY DUNES COLONY ASSOCIATION
AND
MONTEREY DUNES COLONY MUTUAL WATER ASSOCIATION**

October 17, 2015

PRESENT

Frank Williams, Director
Bob Dickinson, Director
John Steinhart, Director
Tom Bugary, Secretary and General Manager

ABSENT

Jeff Schwartz, Director
Todd Davis, Director

WELCOME

The combined Annual Meeting of the Monterey Dunes Colony Association and the Monterey Dunes Colony Mutual Water Association was called to order by Frank Williams, President, at 10:00 A.M., Saturday, October 17, 2015 at the Monterey Dunes Colony Clubhouse, 195 Monterey Dunes Way, Moss Landing, CA 95039. Frank announced that after the meeting, David Shonman, Coastal Biologist, would be making a presentation on the upcoming El Niño threat.

HOMEOWNER INTRODUCTIONS

Homeowners present at the meeting introduced themselves.

PRESIDENT'S REPORT

Frank Williams, Board President, announced that this will be his last meeting serving on the Board of Directors. He said that he has been honored, humbled, and thankful for the opportunity to serve, however he feels that it is time for a change. He gave his thanks to past and present Boards and committees, vendors, brokers, bankers, coastal biologists, and finally to the Monterey Dunes Colony employees. Frank went on to state that he hoped that, during his tenure, the Board had provided a high level of transparency and that he knows the incoming Board will have the same level of openness and communication. The incoming Board, as well as homeowners, will have challenges ahead such as water management, El Niño, short-term rentals, revising our rules, and clarifying the future direction of the Colony. Frank stated that all the incoming Board members were very well qualified and he is sure that the Colony will be in very good hands.

Frank gave a quick summary of the Special Board meeting that took place immediately prior to this meeting. At the meeting, the Board approved the auditors report for FY 2014-2015. It was a clean, unqualified report and will be sent to all homeowners.

The second item that was discussed at the Special Board meeting was the strategic planning committee report. The strategic planning committee - John Steinhart, Committee Chair; George Maciag, member; Terry Opdendyk, member; and Bob Dickinson, member – was initially proposed by Ted Swanson, a previous Board member. The report looks at the next 10 years and addresses the concerns and issues we will face and makes recommendations. The complete report is attached to, and made part of, these minutes.

Homeowners that were present expressed their thanks to the two outgoing Board members – Frank Williams, President, and Bob Dickinson, Vice President.

INTRODUCTION OF DIRECTORS, 2015-2016 TERM

Frank Williams announced that the 2015-2016 Board of Directors were voted in by acclamation. The Directors and officers are:

- 1) George Maciag - Director
- 2) Jeff Schwartz - Director
- 3) Arthur Testani – Director
- 4) Todd Davis – Director
- 5) John Steinhart – Director
- 6) Tom Bugary – Officer (non-voting)

MEMBER BUSINESS

IRS Revenue Ruling 70-604

Frank read aloud a mandatory IRS Revenue Ruling (70-604) pertaining to the current fiscal year. With the aid of a majority of homeowner proxies, it was M/S/C unanimously to approve the resolution, which states that any excess revenue generated by the Association in the current fiscal year is applied to the following fiscal year expenses.

ADJOURNMENT

With no further business, Frank adjourned the meeting at 10:40 A.M. and announced that there will be a brief presentation by David Shonman, Coastal Biologist following this meeting and the annual homeowner’s barbeque will be at 12:00 P.M.

STRATEGIC PLANNING COMMITTEE REPORT: 2015 to 2025

Submitted to MDCA Board of Directors on October 12, 2015

Committee: Bob Dickinson, George Maciag, Terry Opdendyk, John Steinhart

PART ONE – Overview, Focus & Summary

OVERVIEW

This year the MDCA board established a committee to examine long-term and strategic issues facing the Colony. This Strategic Planning Committee looked out ten years, and asked “What would a healthy Monterey Dunes Colony look like in 2025?” and “What key issues confront us in achieving this vision for 2015?”

The Colony that the Committee envisions is that of a residential community whose owners are drawn from busy urban areas to Monterey Bay’s natural beauty and serenity. We envision a Colony that is not only private and well maintained, but whose buildings and facilities are renewed using ever-increasingly attractive and durable materials that blend with what nature has already provided. We envision owners caring for their homes with pride, and inviting guests and renters who respect the Colony’s sense of retreat, and care for the Colony’s beauty, privacy and environment with the same reverence as do the owners.

This report represents the first of what should be an on-going effort to articulate not only a long-term vision for the Colony, but also what it takes to achieve the vision. To that goal, the Committee looked at the current infrastructure, assessed potential environmental threats, and considered some of the things that need to be done make the Colony more attractive to current and future owners within the economic realities of increasing maintenance costs. Although we have collected many ideas for action, we have emphasized problem identification over solutions, which we leave to follow-on committees and residents under the direction of future Boards of Directors.

FOCUS

The Committee focused, and organized this initial work, around four categories of enablers, or threats, to the realization of the vision of the Colony in 2025. They are:

- *Environmental threats to the MDCA and its facilities. [Page 3]
- *Infrastructure components within and around the Colony. [Page 7]
- *The long-term orientation of the Colony as a retreat versus a resort. [Page 15]
- *Economics and the long-term appeal and value of the Colony. [Page 16]

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The good news is that the Colony is not facing serious or imminent environmental threats, with the possible exception of storms and resulting beach erosion similar to those that were experienced in 1982-83 and 1997-98.

Moreover, thanks to good planning and management, the Committee believes there are no urgent concerns with regard to unbudgeted repairs or replacements to components of the infrastructure, such as water and sewer systems, power sources and roads. For the next ten years, we should be in a “watchful waiting” mode, monitoring climate warming, droughts and floods, potential water shortages, and continuing the high level of maintenance that extends the life of our infrastructure. Insurance must be maintained to protect homeowners and property from unexpected events. However, the Committee believes there is need for current and continual evolution of our internet and communication infrastructure.

The Committee considered how rentals positively and negatively impact the nature of the residential living experience and property values. Monterey County has recently restated its definition of short-term rentals within the Coastal Zone in which the Colony is located, and individual owners who rent will have to adapt to however the County enforces their policies. To the extent that short-term rentals are or will be allowed, we hope the Board of Directors can achieve a symbiotic relationship and balance between homeowner residents, rentors (*Note: in this report, “rentors” means MDC homeowners who rent their homes*) and renters in the context of a healthy, economic and desirable retreat today and in 2025. Our long-term vision for the Colony is to preserve it as a natural retreat from the noise and stresses of urban areas from which we draw the majority of our homeowners.

With the challenges and complexity of a 125-acre oceanfront retreat, maintenance costs will increase, and homeowner dues, fees and assessments must continue to be the primary source of Colony income. To make the economics of MDC ownership viable, we see the need to continue to increase the desirability and appeal of our Colony, enhancing its long-term value.

To that end, we observe that while the Colony is maintained in superior fashion, its overall appearance shows the age of its original construction. We believe that to attract future buyers and support property values, we should consider a series of projects over the next ten years to keep the facilities and buildings updated and appealing without detracting from the primary source of beauty of our unique setting - the ocean, beaches and open views of the Monterey Bay. Many of the suggested improvements involve minor costs. Others would require more significant planning and investment. And within the context of the Colony primarily being a retreat rather than a commercial resort, we also recommend a program of promoting the external image and appeal of the Colony located in one of the world’s most beautiful and pristine locations.

We strongly encourage the Board of Directors to continue this initial effort to refine and implement measures to ensure that Monterey Dunes Colony homes and common areas remain aesthetically and economically attractive to current and prospective owners who love and appreciate its natural beauty and are willing to work in harmony to preserve its many unique features.

PART TWO – Detailed Analysis, Concerns, Possible Solutions and Recommendations

1. ENVIRONMENTAL THREATS

Overview

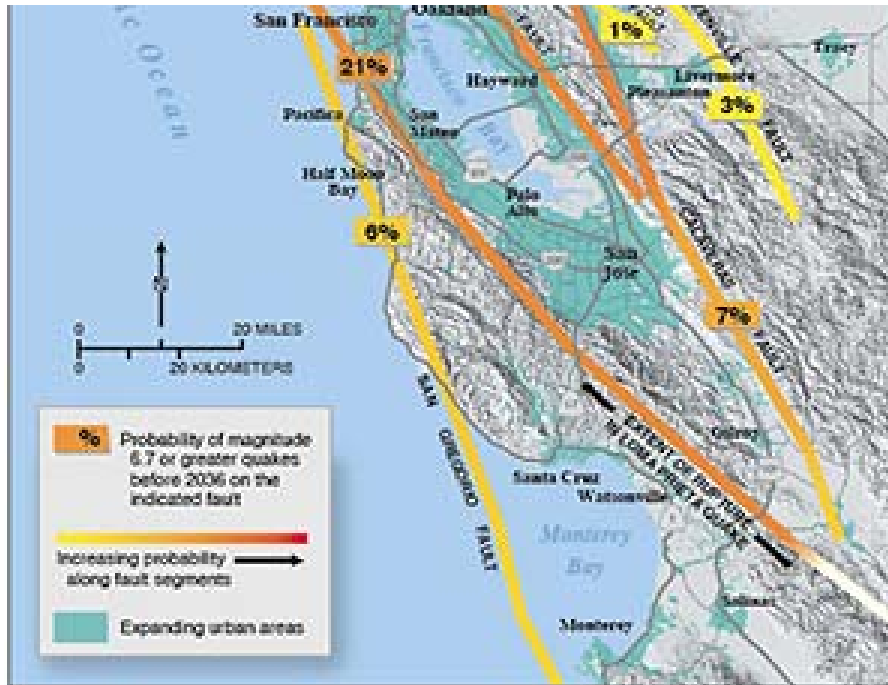
There are a number of environmental threats confronting the Colony. The most important are:

- Earthquakes
- Drought
- Coastal storms
- Coastal erosion
- Fluvial flooding
- Sea level rise
- Escape of septic effluents into Monterey Bay

Interestingly, all of them, with the exception of earthquakes, involve water in one-way or another. We examine each of these in terms of the degree of risk, the extent to which they could affect the Colony, and the possibility of mitigating them or avoiding them entirely.

Earthquakes

Monterey Bay is bordered to the east by the San Andreas Fault, which produced the 1989 Loma Prieta earthquake as well as the 1906 San Francisco earthquake, and the Calaveras Fault, and to the West by the San Gregorio Fault. The latest USGS forecast of the probability of a magnitude 6.7 or greater earthquake in the next 30 years is shown in the figure below.



There is a combined probability for the three faults of 34% over the next 30 years, or about 11% over the next decade.

The amount of damage to the Colony would depend on the magnitude of the earthquake and its epicenter but could be considerable, as the buildings are supported by concrete footings on sand. It is instructive to recall what happened to the original Moss Landing Marine Labs when they were situated on Sandholdt Road in Moss Landing. The building was destroyed due to liquefaction resulting from the Loma Prieta earthquake and was subsequently rebuilt in its current location: http://www.sanctuariesimon.org/monterey/sections/other/sporadic_earthquake.php

Since other forms of mitigation are limited at best, the most critical is having adequate insurance coverage. It would also be prudent to undertake a geological survey to determine the likelihood of liquefaction, as well as of damage from lateral shaking.

Given that the structures are wood frame construction, the greatest impact on them would likely be due to foundation issues. Unfortunately, the feasibility of hardening the building foundations is probably minimal due to cost.

In addition to the structures, damage from a major earthquake would likely include ruptures of water mains and sewage pipes and quite possibly pipes in the septic leaching fields.

Recommendation:

**Maintain the earthquake insurance policies as the primary means of protection against earthquake damage and destruction.*

Drought

Since the last major El Niño in 1997-98, the Pacific Decadal Oscillation (PDO) has been in its negative phase until last year, which for California generally means a lower chance of strong winter storms and a higher chance of drought. We are currently experiencing a strong El Niño event, which could mean more rainfall this coming winter, although almost certainly not enough to fully erase the rainfall deficit that has built up over the past four years. It could also signal a sustained transition to the positive phase of the PDO, which would likely result in a return to more normal, or even above normal, rainfall patterns for next one or more decades. If that transition is not sustained, then lower than normal rainfall would be expected until a sustained transition is established.

In either event, the Monterey area is water poor so even a return to more normal conditions does not guarantee a secure source of well water in the future. While legislation last year (Pavley, Dickinson) mandates that water agencies create plans to sustainably manage ground water, the results from that are years, if not decades, in the future. The impacts and alternatives for dealing with them are covered in the Infrastructure section and will not be repeated here.

Recommendation:

**See recommendations under “Infrastructure- Water” below.*

Coastal Erosion and Flooding

The flip side of the PDO is stronger winter storms when it is in its positive phase, with the associated risks of beach erosion and flooding. The Colony experienced extensive beach erosion during the 1982-83 El Niño and, to a lesser extent, during the 1997-98 El Niño: <http://pubs.usgs.gov/fs/2000/fs026-00/fs026-00.pdf>

Global warming has elevated sea surface temperatures, providing more energy to power strong storms. While it is impossible to predict when we will see similar, or even more powerful, El Niño events in the future, it is entirely possible we could see one this coming winter and the likelihood of one within the next decade would appear to be significant.

Recommendations: Fortunately, there are steps we can take to mitigate risk.

**Adequate insurance coverage is important, as with earthquakes, but more expensive to secure because of FEMA limits. Of critical importance is to maintain the northward flow of sand from the Salinas River in the years the lagoon is breached. This is the fundamental mechanism by which our beach and the offshore sandbar are sustained.*

**Next in importance is dune nourishment. Given the possibility of an imminent transition to the positive phase of the PDO, it is important to conclude agreements with State Parks and the Coastal Commission that allow us to continue this on an ongoing basis—and to secure a reliable source of the sand required to do so.*

**Finally, having the portable wave run-up barriers ready to deploy provides us with the ability to respond quickly in an emergency situation to minimize the effects of a breakdown of our other lines of defense.*

Fluvial (River) Flooding

Atmospheric rivers, colloquially known in California as the Pineapple Express, are huge streams of moisture that originate in the vicinity of Hawaii and impinge on the West Coast. They are the source of a third or more of our rainfall and the difference of one or two in the course of a year can mean the difference between a normal year, a drought year or a year with extensive flooding:

<http://pubs.usgs.gov/fs/2000/fs026-00/fs026-00.pdf>

The most recent atmospheric river to hit California was in December 2013, causing flooding on San Francisquito Creek in the Bay Area. In 1861, atmospheric rivers produced 43 days of intense rain, flooding much of Sacramento and turning the Central Valley into a lake. Scientists estimate that the recurrence time of an event of this magnitude is on the order of 200 years, equivalent to a 0.5% chance in any given year or a 5% chance over the next 10 years. However, it wouldn't take this large an event to create major problems for the Colony. The perfect storm for us would be the combination of intense rainfall causing the Salinas and Pajaro rivers to flood at the same time the storm was creating powerful swells and strong storm surge on Monterey Bay coincident with high tide.

Recommendations:

**Again, adequate flood insurance is important, as are the measures to deal with coastal flooding.*

**In addition, we should map out our location on the surrounding floodplain and identify where there is a risk of flooding from that source.*

**We should maintain and update, as needed, emergency procedures and coordinate with local public agencies to insure the timely warning and safe evacuation of owners, guests and renters in the event that surrounding roads or Highway One are flooded.*

Sea Level Rise

Sea level rise in and of itself is not a threat to the Colony in the next decade. For the California coast south of Point Mendocino, it is not expected to exceed 1 foot by 2030 compared to local sea level in 2000:

http://www.opc.ca.gov/webmaster/ftp/pdf/docs/2013_SLR_Guidance_Update_FINAL1.pdf

It is, however, a threat multiplier for coastal flooding, since it is the equivalent of adding 1 foot to the tides extending the reach of strong swells reinforced by strong storm surge, roughly half of which is already a reality.

Escape of Septic Effluent into Monterey Bay

Since our septic leaching fields are located relatively close to the Bay, there is some danger that some of the effluent may escape into the Bay. The danger is higher for fields that are closer to the Bay and could be exacerbated as the result of severe beach erosion. While there are no indications that this is happening currently, the possibility that it could in the future should be taken into account, since there are organizations such as the Surfrider Foundation that have been aggressive in pushing for mitigation when effluents have been detected:

<http://www.surfrider.org/campaigns/entry/clean-water-at-the-bu-malibu-septic-prohibition>

Recommendation:

**One possible solution would be to use effluent filters to replace some or all of the leaching fields, as circumstances dictate. Such filters produce water of sufficient purity to be used for irrigation and watering and, based on research done by Ted Swanson, appear to be relatively inexpensive. It would be prudent to be prepared to implement such a solution should the need arise.*

2. INFRASTRUCTURE ISSUES

Overview:

MDCA has a variety of utilities and services that are part of the Association's infrastructure. Those considered in the Strategic Plan include: water, septic tanks, power sources, communications and entertainment services, and roads.

All of these need periodic repair and maintenance by the Association or its suppliers. Major repair or replacement expenses are covered through our annual operating budget and our reserve fund. We currently have \$2.1MM in the reserve fund, which is just under 30% of a fully funded reserve plan. There are some major replacement items noted below that are not included in our reserve plan. In our opinion, through good maintenance, there are no major infrastructure components (funded or unfunded) that are likely to require complete replacement in the next ten years. However, our internet and communication services do need current and continual enhancement. *(See below)*

Water.

a) Current System: MDCA depends entirely on two operating wells that draw off of the Salinas Valley Groundwater Basin, one of the largest coastal groundwater basins in California.¹ We have had four wells since 1974, two of which are shut down and capped off, and the third and fourth were drilled in 1993 and 2003, respectively. The two operating wells are used alternately (i.e. instead of simultaneously) to keep them functioning efficiently, allow for needed maintenance, and to maximize their operating lives.

b) Concerns:

(i) Dropping water well levels. In the past fifteen years, the static water level in our wells has dropped 19 feet.² With the current drought, more farms and municipalities are tapping into the aquifer (i.e. Salina Valley Groundwater Basin), creating a threat that the Association may encounter water shortages and continued rationing requirements in the future.

(ii) Contamination. Castroville, which taps into the same aquifer, is finding increasing levels of nitrates, most probably as a result of chemicals from agricultural fields leaching into the soil and ground water. To date, MDCA's water continues to test as fully safe, drinkable water.

(iii) Leaks and mechanical failures. There have been occasional leaks and minor pump problems that have been promptly repaired. The system needs to be continually monitored and maintained.

(iv) Independent system versus connecting into an adjacent municipal water system. Seven years ago, an MDCA committee looked into merging our water system into one of the nearby public water systems. We determined that aligning ourselves with another water agency or district would deprive the association of the control of our water and its low cost, and offer no benefits other than relieving the Association of the administration of its own water enterprise.

c) Possible solutions:

(i) Aquifer replenishments. With the trend in climatic warming and modestly rising sea levels in our coastal area, we could see more El Niño phenomena that could bring harsher winters and more rains. As noted in the Environmental Threats section above, it would take several very wet years to replenish the aquifers, as the rainwater and river overflow has to penetrate 1350 feet of clay and rock. State water management agencies will do a better job of managing outflows of local rivers, so that water overflows during the winter are directed back into the aquifers rather than out to the ocean.

(ii) Improved water recycling. Public agencies will also take advantage of improved technology for reclaiming wastewater, including sewage, and treating it to remove solids and impurities for use in irrigation, to recharge groundwater aquifers, and for commercial and residential use, including potable water. (There are also opportunities for the Association in this respect.)

(iii) Desalination.³ MDCA has the ability to add currently available equipment to its water system to draw water from the ocean and remove the salt, making it a source of water for irrigation and drinking. A rough estimate of the current cost is between \$200,000 and \$300,000, which could be covered by a special assessment to the homeowners. However, the major problem is the production of brine.⁴ Brine is the liquid residual that contains high concentrations of sodium chloride and other

dissolved salts generated during the treatment process and it cannot be dumped back into the ocean and would have to be trucked to a dumpsite. This would add ongoing costs to the Association.

d) Recommendations:

(i) *MDCA should continue to monitor and encourage water conservation.*

(ii) *Adding desalination equipment is feasible but the disposal of the brine makes this option prohibitive for the immediate future. If the drought conditions in California continue, it is likely that both public and private initiatives for new desalination projects will gather momentum. New technology might help improve the energy efficiency of desalination and provide better solutions to the brine disposal problem.*

(iii) *MDCA is unlikely to run out of water in the next ten years and therefore we recommend a “watchful waiting” approach and keeping track of the progress of desalination efforts, especially in Sand City, Marina and Moss Landing where such facilities are in operation, under construction or being proposed.*

Sewage Disposal

a) Current System. MDCA disposes of grey water (from showers, sinks, washers) and sewage through septic tanks. There are nine septic systems on the property and 17 leaching fields. Units are connected to a respective septic system through PVC waste disposal pipe. Some systems are configured with three cement holding tanks (4,500 gallons), others with four such tanks (6000 gallons). Solids sink to the tank bottom and ferment and decompose. The liquids rise to the top and, depending on the system, move to two or three effluent-holding tanks, then through leaching lines and empty into the sand that acts as an additional filter. These have been in place since the beginning of the Colony in 1974.

The Association contracts a third party to empty the solid waste contents once a year into a truck and transport it to a licensed dumpsite. Seawater along the beach is tested periodically by the State and/or County agencies for bacterial contamination and no problems have been reported to date.

b) Concerns:

(i) At some point in the future, the septic tanks will need replacement and this is not a funded item in the reserve budget. Given the second home nature of the Colony, most tanks are not heavily used and because they have been regularly pumped and maintained, it is unlikely that they will need replacement in the next ten years. Moreover, it is highly unlikely that all units will need replacement at the same time. Heavily rented units may be the first to need replacement.

(ii) A major earthquake, presumably greater than the Loma Prieta earthquake of 1989, might cause cracking or separation, and even this scenario does not suggest simultaneous and extensive damage.

(iii) A rough estimate for replacing a septic tank is \$25,000 to \$30,000.

(iv) Were there to be a significant crack or connection break that requires replacement of a tank, this would involve permit(s) that would likely be difficult and slow to obtain and it would render a unit to be not occupiable until the permit is issued and replacement work can be completed.

c) Possible solutions:

(i) Ideally MDCA would be part of a neighboring public sewer system, but this would require complicated permits across both public and private properties and significant trenching, pumping and hookup costs.

(ii) Cement was a good choice by the original builders of the Colony as it provides a long life for the septic tanks. Assuming that the quality of the concrete in the original septic tanks from 1974 is good, these tanks should last for the next ten or more years as they have been well maintained.

d) Recommendations:

(i) *Continue to maintain the tanks by pumping them annually.*

(ii) *Educate homeowners not to put uncooked vegetables into their garbage disposals as these form sludge that is most resistant to decomposition and hard to remove. It also creates carbon dioxide and methane (biogas) that gradually destroys the roofs of the cement holding tanks.*

(iii) *Continue monitoring the effluents leaching into the soil for any signs of bacteria and replace leaching lines as needed.*

(iv) *Replacement should be made as required when there are signs of the deterioration of the cement linings of the tanks, and charged as a special assessment to the owners that feed into the sub-system that needs replacement. Replacement costs for the tank for the homeowners' association buildings (#195) would be paid through the operating budget that year, or the next if the work can be safely postponed.*

Power

a) Current sources of power. PG&E provides underground transmission lines and service for electrical power. The Association recently completed the installation of solar panels on a former tennis court to provide low cost energy for common area lighting. There are no gas lines on the property.

b) Concerns.

(i) Costs are likely to increase. Long-term macroeconomic projections indicate that gas will be plentiful and an inexpensive alternative to electricity. Oil costs are currently low (below \$50/barrel) but that has not translated to lower rates. PG&E costs are passed on to its customers and history indicates that they only go up.⁵

(ii) The Colony has periodic disruptions in power, especially during winter storms. The Association remains largely dependent on PG&E for repairs. In the event of extensive power outages, PG&E addresses the most densely populated areas first.

c) Possible solutions

(i) PG&E should be able to provide all the electricity needs of the Colony for the foreseeable future.

(ii) The Colony's solar panel installation for common area lighting will demonstrate if solar energy is a lower cost alternative to electricity.

(iii) Gas lines could be brought into the Colony from Moss Landing or Castroville pipelines. (The Moss Landing power plant is a gas-fired electricity generating facility and PG&E has a major gas transmission line feeding into it.) Getting permits, installing underground gas lines across public and private property, and the conversion of electrical wall/water heaters and appliances would involve significant time and costs for the Colony.

d) Recommendations

(i) PG&E will continue to maintain the electrical power lines making the status quo acceptable with projected incremental costs limited to PUC regulated rate increases.

(ii) If the current solar panels fulfill their promise of providing low cost power for common areas, we recommend that the Association undertake a cost-benefit analysis of installing solar panels on the roofs of garages, and possibly even homes, to supplement or replace electrical energy. Solar panel technology will continue to improve in energy conversion efficiency over the next ten years.

(iii) Given the projected long-term low cost of gas, extending gas lines to the Colony is an attractive alternative that should be further analyzed if Solar panels fail to produce a sustainable, economic source of power.

Communications and Entertainment

The Colony has limited telephone and mobile/cellular service. Moreover, the Colony has only a single internet service provider whose current service is substandard in performance, pricing and service compared to nearby metropolitan cities. Over the next 10 years, all of the Colony and resident communications, telephone, television, entertainment, security and certain healthcare will be dependent on having accessible, quality internet performance at competitive pricing. This is a major challenge for Monterey Dunes Colony.

a) Current services:

(i) Telephone: The Association depends on a combination of underground telephone lines owned and maintained by AT&T. Mobile service is also available from a variety of companies, including AT&T, Verizon, Sprint, T-Mobile, and U.S.

Cellular. Telephone service using the internet (VOIP) is available through many free and paid products.

(ii) Television, Video and Audio services: The Colony is serviced directly by satellite service providers DirecTV and Dish Networks. Television, video and audio service using the internet is available through many free and paid products.

(iii) Internet: MDCA currently is served solely by Red Shift Internet of Monterey.

b) Concerns:

(i) Mobile/cellular communication signal strength from all suppliers is weak inside the Colony buildings, and without special action by the Association it is likely to remain so due to the small population at the Colony and the low number of automobiles using cellular networks on Molera Road.

(ii) The major national Internet providers do not currently offer service to the Colony, and have no immediate plans to do so. Except for Red Shift, other regional providers do not serve the Colony or surrounding areas. Specific concerns about Red Shift include:

- 1) Red Shift currently provides Internet services to the Colony through a wireless link. While better than 24 months ago, Red Shift's service has moderate and highly variable performance at prices that are substantially higher than neighboring metropolitan areas.
- 2) Red Shift's service meets the basic needs of email, text, and web surfing. The service today barely meets the needs of telephony (VOIP) and for streaming of HD television or movies in real-time. The service is not currently capable of serving the new "4K" television broadcast that will likely be available in 2016.
- 3) Red Shift's customer service is inadequate to meet our current needs, and Red Shift's management/ownership is mercurial.

c) Recommendations:

(i) *Re-establish the MDC Internet Communications Committee. We recommend its agenda include:*

**Continual work with Red Shift Internet to improve performance and pricing.*

**Establishing relationships with ATT and Comcast, which due to conditions of recent mergers may require them to serve MDC as an "under served community."*

**There is a planned high-speed fiber-optic Internet cable to be installed alongside Highway 1 from Santa Cruz to Monterey. Work to establish a partnership with various vendors to provide high-speed Internet service to MDC using this cable. Establishing this service may require an MDCA special assessment.*

Roads

a) **Current status:** Access to Monterey Dunes from Highway 101 will improve as beginning in 2018 a four-lane expressway will be constructed adjacent to Highway 156 between HWY 101 and Castroville, and the existing Highway 156 will become a

frontage road. A second phase will result in a new interchange to connect the new four-lane expressway with Highway 101. Improvements are also planned to relieve growing congestion between Molera/Nashua and Monterey on Highway 1. Public agencies maintain Molera Road and the road from Molera to the Salinas River State Beach on which the MDCA has an easement for access to the Colony. From the easement to the gate of Monterey Dunes, it remains unclear whether the Colony or the State is responsible for road maintenance. Inside the gate, road maintenance belongs to MDCA.

b) Concerns:

(i) While the road between the entrance to Salinas River State Beach and the MDCA gate is in good condition, eventually it will need resurfacing. The Association has not raised the issue with any public agency as to who would pay for resurfacing and it is not in the Association's budget to resurface this portion of road.

(ii) Harsh weather conditions and earthquakes could have an impact on the quality of MDCA roads.

(iii) Increased traffic from renters and service vehicles could shorten the life of the recent repaving efforts.

c) Possible solutions:

(i) Improvements to nearby roads (and the creation of daily train service from Castroville to the Bay Area ⁶) will improve access to the Colony.

(ii) The costs of repaving of the roads inside the gate are already included in annual budgets.

(iii) Additional unplanned costs such as parking space markings can be handled within the budget rather than in the reserve fund.

(iv) Major repairs to roads from unexpected weather events or a severe earthquake would likely require special assessments to the homeowners.

d) Recommendations:

i) Roads inside the gate have been well maintained and costs for future repaving and repair should continue to be part of the operating budget over the next 10 years.

ii) In the hope that the county or public transportation agency will take the initiative to repave the portion of road between the easement and the Colony's gate whenever it needs repair, the Association should be in a "wait and see" mode. Should it become clear that such repaving is going to fall on the Association, its cost should be covered by a special assessment.

Infrastructure Summary: Overall, with the exception of our internet and communication services, the infrastructure of the Colony is in good shape and there is no discernable need for additional special assessments to cover low-probability failures that might be anticipated; over the next ten years, there are going to be additional costs for replacement and repairs. Technology improvements in solar energy should enhance the ability of the Colony to increase its self-generating power supply, and, similarly, technological advances in data communications should enhance the quality of the Association’s data communications and in-unit entertainment platforms.

¹ The basin consists of sand, gravel, and clay that have been deposited over millions of years. The basin is drained by the Salinas River, which extends approximately 150 miles from the headwaters near San Luis Obispo County to the mouth of the river at Monterey Bay near Moss Landing. The total drainage area of the basin is about 5,000 square miles within the Salinas Valley. The Salinas Valley ranges from 10 miles wide in the north to 30 miles wide in the south and is about 120 miles long.

² The measure of static water is the distance from the ground level down to the water in the wells. It is the “resting” level of water when there is no pumping activity. The full depth of MDCA’s well #4 is 1350 feet deep.

³ Existing desalination technology can be grouped into two categories: thermal distillation and reverse osmosis. Thermal distillation processes account for the majority of desalinated water, but advances in reverse osmosis technology in the past two years have increased the utilization of this filtration-based process. Both systems produce a brine byproduct that threatens marine life and the benthic zone (ecological region at the lowest level of a body of water) ecosystems when discharged into the ocean. Reverse osmosis is the process of separating dissolved salt and fresh water by forcing fresh water through an osmotic membrane, leaving a salt concentrate on one side of the membrane and fresh water on the other. This requires substantial amounts of energy to overcome the osmotic pressure and force the water to pass through the membrane. The higher the pressure, the faster the fresh water can pass through the membrane and the higher the energy costs. For every gallon of fresh water produced through reverse osmosis, a gallon or more of brine is also produced.

⁴ Conventional Brine Disposal Methods

Method	Description of Technology	Benefits and Constraints	Region Appropriateness	Land Requirements	Permitting Requirements
Surface Water Discharge	Direct disposal to surface water such as lakes, reservoirs, or rivers.	Low capital and O&M costs. Detailed analysis required to obtain NPDES permit.	Anywhere surface water body is available.	Small	National Pollutant Discharge Elimination System (NPDES) permit required.
Sewer Discharge	Direct disposal to sanitary sewer system.	Cost-effective if existing sewers and wastewater treatment plants nearby. Permitting process requires less time than NPDES. Fee typically required for disposal.	Anywhere sewer capacity is available.	Small	Industrial Waste Discharge (IWD) permit required.
Deep Well Injection	Brine injected into porous subsurface rock formation.	Economy of scale required. Meticulous site evaluation needed. High capital costs.	Dependent on local geology.	Land required for injection well field	Underground Injection Control permit required.
Evaporation Ponds	Pond that utilizes solar energy to reduce water content in brine solution.	Very reliable, little mechanical equipment required, economical for small volumes.	Dry climates characterized by high evaporation rates; Areas where large quantities of land available at low cost.	Large	Some states may require monitoring.
Land Application	Full strength or dilute brine sprayed onto land as irrigation water.	Backup disposal method typically needed. Limited types of vegetation can grow with high salinity water.	Anywhere application exists.	Large	Monitoring is typically required

Note: Sand City has a reverse osmosis system and injects its brine in a below sea level horizontal well beneath the coastal bluff.

⁵ The Moss Landing power plant is owned by Houston-based Dynegy, which attempted to sell the plant and in 2015 declined several bids as too low. PG&E contracts with Dynegy Moss Landing for some of its power transmission requirements.

⁶ In 2013 efforts began to create two daily trains that will operate between Oakland, San Jose, Gilroy, Watsonville, Castroville and Salinas.

3. Retreat Versus Resort

Overview:

In a planned, gated beachfront community like Monterey Dunes Colony there are many tradeoffs in creating the desired style of living, owning, renting and operating. The Committee concentrated on the continuum of one particular trade-off: Should the long-term vision be about the style and substance of living and the appearance of the Colony as a natural retreat away from the metropolitan rush and optimized more for the benefit of owners and their guests? Or, should the focus be more on the commercial success of services and amenities optimized for the benefit of owners who rent? (These are not binary, nor are the characteristics mutually exclusive.)

After considering the origins of the Colony, the explicit prohibition in the CCRs against conducting business on the premises, its 40+ year history and its current constituents, the Committee believes that the Colony is and should continue to be a natural “retreat” from life and work in a metropolitan area (rather than a “commercial resort”). The Committee envisions this characterization as a keystone to the success and desirability of the Colony in 2015 and in 2025.

The Committee believes that there needs to be a balance and synergy between homeowner residents and renters who appreciate the natural beauty of Monterey Dunes and who also represent potential new owners providing long-term economic continuation and vitality to the Colony.

b) Considerations

(i) Over the past several years, there has been both an increase in the number of rentals and the renting frequency of certain units. Today, approximately 1/3 of the units are being rented, some only occasionally and others regularly and all year round. Inexpensive advertising on multiple social and commercial Internet

networks makes renting easier than ever before to potential renters from around the world.

(ii) The County of Monterey and the Coastal Commission currently determine the degree to which short-term renting is permissible.

(iii) As the volume of rental units and renters increases, the Colony has experienced a rising number of problems, including parking, garbage, unauthorized pets, trespassing on fragile dunes, increased wear and tear of common facilities. There are also concerns about rental-related liabilities and Association insurance costs, and property values for those owners next to or nearby heavily rented units.

(iv) Problem reporting, penalties, and enforcement have been minimal and ineffective in stopping or reducing the number of problems. Neighbors do not often report problems with nearby renters unless they are extreme breaches of the rules, and the Association imposes only modest fines against the owners, well below the level of the deposits held by the owners renting their unit(s).

(v) There is a separate Owner–Rentor Committee appointed by the Board of Directors that is analyzing the problems and challenges associated with rentals.

c) Recommendations

(i) We rely on the Owner-Rentor Committee's best efforts to come up with position statements and recommendations to help the Colony address complaints and move forward on this important issue.

(ii) We urge the Board of Directors to consider any policy decisions or rule changes regarding rental units be made in the context of our unanimous view that from the beginning and for the foreseeable future, the Colony is a "retreat"; and to preserve and promote MDC as a non-commercial homeowner's association that is a unique and highly appealing getaway for owners and, within the boundaries of applicable law and the Colony's own CCRs, a place that renters can also enjoy with the same respect for the property and its natural setting that homeowners have displayed for more than 40 years.

4. ECONOMICS AND LONG-TERM APPEAL

a) Current Situation:

Today, the purchase price and yearly expense of MDC homes limits ownership to those with substantial net worth. Moreover, the Colony cannot "save its way" to financial vitality and attempting to do so will only guarantee a steady erosion of relative property values, resulting in fees and assessments being uneconomic for

many residents. Real estate professionals both in Monterey and in the SF Bay area describe the Colony as a “well kept secret” and as such they view it as “undervalued” by prospective buyers.

b) Vision for 2025

To have high demand for ownership at increasing values over the next 10 years, the Colony needs continual refreshment and improvement. The vision of the Colony that we aspire to is a place and experience that is highly desirable, not only to its current residents but also to potential residents from the SF Bay Area and Monterey Peninsula.

c) Long-term strategy

We need to build the image of the Colony and increase demand for ownership, thereby increasing property values that justify the growing expenses we foresee in both maintenance and improvement costs.

d) *Recommendations*

i) One or more committees should be constituted to address the various elements of understanding the desires of our current residents, the appeal of the Colony to potential new owners, and the improvement of the facilities and common areas on the property.

ii) Survey the current residents for a deeper understanding of their needs and desires with regard what to the Colony might look like, and how they would make it more appealing to current and future owners.

iii) Study surrounding areas and comparable beach communities in other parts of the state and country for additional ideas and elements the Colony might aspire to attain.

iv) Partner with Monterey Peninsula and SF Bay Area realtors to understand and appeal to individuals and families who can afford a second-home and would invest in a property like the Colony that cannot be found or duplicated elsewhere.

v) Establish a media program that highlights the unique characteristics of home ownership at MDC.

vi) Consider a “concierge service” to assist homeowners in contracting for repairs and cleaning services; make local reservations, and offer other services that add value to the quality of the living experience.

vii) Upgrade the appearance and functionality of the Colony utilizing our natural beauty and setting to increase desirability and property values.

Below are examples of some ideas for consideration by subsequent committees:

Major Project Ideas:

- 1) Refresh the clubhouse. It can maintain its rustic look, but it needs contemporary furnishings, carpets, window coverings, kitchen appliances, etc.
- 2) Consider an expanded deck with more picnic tables, chairs and umbrellas.
- 3) Add a small gym with modern equipment, perhaps in the current storage area adjacent to the clubhouse.
- 4) Update the outdoor athletic facilities, including conversion of the pool to solar.
- 5) Replace remaining wooden walkways with "Trex" for a cleaner look and splinter-free experience.
- 6) Replace home sidings, roofs, and decks with attractive, longer-life composites.

Low-cost ideas to enhance appearances

- 7) Redo parking spots with fresh paint in a color that blends with the environment; consider numbering of parking places.
- 8) Landscape walking paths and places to sit with family, friends, neighbors.
- 9) Make the front gate welcoming. For example, landscape the entrance with flowering plants that are natural to our dunes.
- 10) Update signage throughout and eliminate those signs that are no longer necessary (e.g. tennis tournament blackboard; telephone & "joggers path" signs).
- 11) Have real estate agents use uniform signage.
- 12) Assess the actual use of vending machines, and if appropriate, remove them.
- 13) Relocate the MDCA refuse trailers that are in the club parking lot, perhaps where the storm barriers are.
- 14) Consider a flagpole, perhaps one for a colorful Monterey Dunes pennant.
- 15) Paint hydrants and overflows.
- 16) Paint mailboxes and replace lettering where necessary.
- 17) Investigate drought resistant but colorful hanging plants that could be attached to common area light posts.
- 18) Where possible, level access points to the beach.