

# Observations on National Park Management in the USA 2000

by John Sinclair

From 1st to 11th July, 2000, I visited a number of 4 National Parks, 3 National Monuments, 2 National Recreation Areas and 2 National Forests as well as reserves along the Colorado River managed by the Bureau of Land Management, the equivalent of the Queensland Department of Natural Resources, and State Parks mainly in Southern Utah.

Subsequently, while attending the Goldman Environmental Prizewinners Reunion in San Francisco also revisited the Golden Gate National Recreation Area for the fourth time. Apart from the personal experience of these visits I was anxious to discover any new or helpful developments in National Park management from the premier National Park Service in the world which could assist National Park management in Australia, particularly Fraser Island.

Our itinerary took us to areas immediately north of the route I had followed in December 1998 when we visited the Grand Canyon and Mesa Verde World Heritage areas and at times our 2000 mile route took us within 20 miles of that route. For a report on that see "Management of American Natural Areas" (as observed December 1997 — January 1998).

This report is complementary to that report and a previous report prepared in 1993 after visiting two of the world's most heavily visited national parks, the Great Smoky Mountains World Heritage area and the Golden Gate National Recreation Area which particularly focussed on the role of volunteers within National Parks. Both reports can be seen on my home page: [www.sinclair.org.au](http://www.sinclair.org.au).

Our itinerary took us through some of the grandest and most majestic scenery I have ever witnessed which was observed not just in the various parks and protected areas but along the highways and scenic byways we traversed during this 12 day odyssey. In outline it was as follows:

**July 1, 2 and 3:** Zion National Park.

**July 3:** From Zion to Richfield along Scenic Byway 89 passing through dissected canyon country, magnificent scenery and the Fishlake National Forest.

**July 4:** Richfield to Moab along the incredibly scenic Interstate 70.

**July 5:** Arches National Park.

**July 6:** Scenic Route 128 along the Colorado River.

**July 7:** To Blanding and State Park then along Scenic Byways 95 and 24 to visit Natural Bridges National Monument, and then through the Glen Canyon National Recreation Area on the Colorado River to the small town of Torrey.

**July 8:** Follow Scenic Byway 12 through the Dixie National Forest to Boulder, then passing through the Grand Staircase Escalante National Monument to Cannonville, one of the small communities serving the adjacent Bryce Canyon National Park.

**July 9:** Bryce Canyon National Park.

**July 10:** Bryce Canyon National Park through 2 more sections of the Dixie National Forest, Panguitch Lake State Park and finally the Cedar Breaks National Monument.

**July 11:** Was a journey from St George, Utah via Las Vegas and San Jose to Berkeley University in California, site of the Second Goldman Prizewinners Reunion. Part of the Reunion involved outings to the Golden Gate National Recreation Area which has become familiar from previous visits but on this occasion we had more direct interaction with the actual Volunteer Program which had been the major focus of previous visits.

Rather than describe all of the detail of the visits which are in personal diary notes, this report focusses on some of the more relevant issues pertinent to National Park management which may be of interest to Australian park managers.

## Categories of Protected Areas

It is worth noting the difference in the various types of protected lands within the United States.

National Parks have the highest level of protection. In the United States National Parks are approved by Congress. They have about the same level of protection as Australian National Parks. The main difference is that there are a lot of historical tourist concessions which now remain in National Parks which date back to the time when National Parks were primarily valued as recreation areas rather than for their protection of biodiversity.

National Monuments have virtually the same degree of protection as a National Park except that they are decreed by the President rather than Congress. Some National Monuments have subsequently become national parks. President Clinton created the largest national Monument in 1996 when he established the Grand Staircase - Escalante National Monument of which adjoins many other protected areas including Capitol Reef and Bryce Canyon National Parks.

National Recreation Areas also cover large areas but have a lower level of protection and tolerate many more human modifications of the environment. Glen Canyon National Recreation Area is focussed on a huge man made Lake Powell formed in a stunning canyon of the Colorado River above the Grand Canyon. It is a Mecca for boating enthusiasts who transport huge cruisers through hundreds of miles of desert country to go boating in this large and very scenic waterway. The Golden Gate National Recreation Area includes some very historic areas of San Francisco on both sides of the Golden Gate and Alcatraz Island. Although it has been heavily impacted during the last 400 years of human settlement, it annually attracts more than 25 million visitors. The small remnant redwood forest of Muir Woods attracts over 2.5 million alone and beaches and hiking trails add to the attraction.

National Forests cover huge areas but not all are contiguous. They offer a large array of recreation opportunities. However they also include designated wilderness areas which have to be protected to the same prescription as National Park wilderness areas.

The Bureau of Land Management (BLM) is something akin to Queensland's Department of Natural Resources and also includes designated wilderness. It is even more accommodating of recreation opportunities than the other Government land management agencies.

Unlike Australia, all unassigned land in the United States belongs to the National rather than the State Governments. However, State Governments do proclaim special areas of aesthetic, cultural or historic importance as State Parks. From experience these usually cover only small areas and do not have nature conservation as a primary focus.

## **Visitation**

All national park in the USA have experienced exponential growth in visitation since the 1970s. Despite the remoteness of these Utah national parks from major population densities these have not escaped the growth which has lifted the visitation of Zion and Bryce Canyon National Parks to more than 2.5 million visitors annually. This is a ten-fold increase in 30 years. From observations around the car parks of vehicle registrations, it appears that the biggest number of visitors is generated within Utah but this is closely followed by California. However almost vehicles registered in almost every mainland state were observed.

Our visit coincided with the beginning of the peak summer (long school vacation) visitation period. It was the Independence Day long weekend while we were in Zion and despite temperatures in the high thirties every car park seemed to be full.

The American love affair with the automobile and the vehicles themselves pose the most difficult and politically sensitive management issues for the National Park Service. Car parks have grown and are visually intrusive and almost perpetually jammed full.

## **Transportation Shuttles**

To address the problems of car parking in the two most heavily visited parks, Zion and Bryce Canyon, have introduced a shuttle service and tried both incentives and disincentives to reduce the traffic problems in the park

**Entry Fees** for American National Parks are variable but those for Zion and Bryce Canyon were the heaviest we have yet encountered within an American National Park. A charge of \$20 per standard motor vehicle for a 7 day pass applies. This is reduced to \$50 for an Annual Park Pass to all US parks managed by the National Park Service. However this levy did not seem to deter many motorists who would pay that much even for a day trip or in the case of Zion just to drive through it and the tunnel. Fees were not sufficient disincentives.

In Bryce Canyon the shuttle had been introduced only two weeks prior to our visit to cater for the influx of summer visitors. Only 6 weeks were allowed from the acceptance of tenders to when the scheme had to be operational and it was still having teething problems when we used it.

The incentive to use the Bryce shuttle is the fact that the entry fee to the park is reduced from \$20 to \$15 if cars are left outside the park and the free shuttle used to get in to the park. Unfortunately this was not widely advertised when we used the infant service and we turned up at the park entrance and had to return some miles to the small and typically ugly National Park entry village of Ruby's Inn to park our car and catch the shuttle.

A small incentive for taking private vehicles is that there are stops which people could make in their vehicles where the shuttles didn't stop and some places (admittedly few) where vehicles could go which were not on the shuttle routes. This would be justification for some to use their own vehicles over taking a shuttle. Unfortunately though many of private vehicles are Recreation Vehicles (RVs) which are larger than the shuttle buses and even tow huge trailers behind with four wheel drives on them. These quickly clutter up parking spaces and at least 15% of the vehicles in the parks seemed to be RVs.

In Zion the shuttle service has been operating for many years. It has an incentive that one can only traverse the full length of the Scenic Drive up Zion Canyon by shuttle. Private vehicles are banned from the scenic road unless they are going to Zion Lodge, an old accommodation concession. This is a loophole which is used as a cover and it seems that many private unauthorized vehicles sneak in as far as the Lodge. They can't go further than the lodge but it keeps Enforcement Officers of the National Park Service busy policing this. I saw many vehicles being booked and evicted from this section of park.

An additional incentive to use the shuttle Bryce is the frequency of the service. They ran every 6 to 8 minutes while we were there and it was easy to stop off at one site and board a subsequent shuttle. They also carried cycle tracks and encouraged cyclists to take the shuttle up the Canyon. There was also a free shuttle service which ran right through the entry communities of Springdale and it was widely publicized that motorists should leave their cars at their accommodation or in the town parking areas and take the shuttle to the park. In this way the shuttles has offered a free community bus service which was gaining increasing support.

Unfortunately there is a through road in Zion Canyon and although one had to pay the Park Entry fee to use it there was very heavy traffic and it detracted from the tranquillity of the park and encouraged more traffic to ignore the shuttle offers.

**Horses and Mules:** In many parks there are remnants of old concessions where commercial operators stable horses and mules within the park for riding. This was especially evident at Bryce Canyon (mules) and Zion where the trails were as big as roads and intrusive even though they seemed to be restricted. I was unable to establish the rules relating to these concessions nor what impacts other than the visually obvious trails they were having.

### **Interpretation**

The interpretation in the literature was very good, especially for the National Parks and especially relating to the geology which is the most significant feature of the parks we visited. However other interpretation is limited especially with on site signage and at the visitor centre.

Another conspicuous loss of opportunity was the lack of interpretation by the drivers in Zion Canyon. We were told that this was because the public address systems in the buses could be heard outside and that this would distract from the tranquillity of the park. We thought that the PA would barely be more audible. We thought that taking the shuttle would enable us to learn more about what we were seeing from the drivers. We were disappointed except at Bryce Canyon on one of their longer shuttle runs.

The Green Shuttle is very popular and people need to book in some hours in advance to secure a seat. It runs the full length of the Scenic Drive and takes about 2.5 hours. Unfortunately the times are not well coordinated with also participating in other activities. For example, the Ranger guided walk we would have liked to have done started about 15 minutes before the shuttle returned.

We did learn from our driver though that about 60 drivers had been engaged to drive the shuttles and all had undergone an 80 hour training period before they commenced work. The orientation included a comprehensive First Aid course and a lot to do with appreciating the geology a special feature of the park but also to make them aware of the management issues of the park. For example, our driver who happened to be a volunteer fireman with a special interest in fire management was able to gain a detailed appreciation of the fire management policies which were being actively implemented. Unfortunately though his ability to communicate

the other park values seemed to be only on par with Australian bus drivers.

Brochures for the parks were excellent and a set was presented to the Great Sandy Interpretation Officer. These are good but they have to be read at the time and there was little opportunity once in the field which is why it seems better if they are augmented by more signage and other forms of "on-the-spot" interpretation.

The best "on-the-spot" interpretation related to the necessity to preserve the desert's "cryptobiotic crust". There were many signs to increase awareness of the values of this special feature and the need to protect it.

However there was a complete lack of "on-the-spot" interpretation in the Cedar Breaks National Monument where more than 80% of the spruce trees in the spruce-fir forest have died within just a couple of years as a result of a plague of spruce borers. I had to make many inquiries to determine what the reason for the devastation was. I was more alarmed because I had seen a similar disaster in Great Smokies National Park in 1993 and I needed to know what was being done about it as it was having such an obvious impact. Eventually I was told that the borer was a native and that records indicate cyclical devastation of these forests every 300 to 500 years and that the Parks Service would do nothing at all about it as they deemed it to be a natural phenomenon. I couldn't understand why this could not have been made more explicit to the public.

There were many other features which we encountered along the way where there was a total absence of any interpretation. For example, there were some great roadside rest areas with grand panoramas. Unfortunately none of these seemed to have a name and none were marked on the road maps although they were well serviced and well patronized. There was therefore no interpretation about even the features we were looking out on in most cases.

At one stage in the Dixie National Forest I saw several huge lava flows in the distance. I had been unaware of lava flows in this region but there was no signs or any information explaining them. I was only able to confirm them by seeking information from the US Parks Service at Cedar Breaks. More attempts to improve the public appreciation of the

environment will do much to help gain public support for protecting it.

## **Ranger Guided Walks and Talks**

I was very keen to engage in ranger led activities but our busy schedule prevented this as much as we would have liked. Previously the highlights of my visits to Mesa Verde and Grand Canyon National Parks were the Ranger led talks. They were really inspirational I wanted to see if these had been typical of Ranger led activities or just a couple of isolated exceptions.

I was surprised that at the very busy Zion Canyon Visitor Centre there were only a handful of people to attend a Ranger Talk on the geology. I was told that prior to the advent of the shuttles the talks area would have been full to overflowing. One of the down sides of the shuttle service is that although they run every 8 minutes, people rush to make sure that they don't miss the next one waiting to take off. This has had a dramatic impact on the patronage of Ranger led activities.

The talk itself to some extent reflected a lower morale because of the poor support but it was still technically very good and illuminating. Subsequently, the Ranger who is only employed seasonally provided more insights. For every vacancy in the Interpretation section of there are up to 1400 vacancies. In the meantime, he moves from park to park wherever there is an opportunity for a seasonal ranger but without any job security which in the United States means access to health benefits.

## **Visitor Centres**

Associated with the issue of interpretation is the role of visitor centres. There is a move to upgrade and relocate Visitor Centres in the parks visited. This is essential in some cases as they are very popular and also very crowded. This is because they are staffed by volunteers and are major outlets for the sale of books, postcards and souvenirs. This seemed to take precedence over the role of interpretation. In many places interpretation was relegated to a very low priority and squeezed into a small pocket or corner of the Visitor Centre. This was particularly true of Capitol Reef and Bryce Canyon.

The Zion National Park has just been blessed with a superb new and spacious Visitor Centre. However despite many applaudable architectural design features discussed below, it had one major weakness. It had virtually ceased to be any more than a retail outlet as a result of deliberate park management decisions. The former Centre had been located well inside the Park gates. This one was virtually right at the gate and everyone had to pass it. Unfortunately the design principle is that unless people want to buy something they will quickly pass it and so prevent a huge congregation of visitors around the centre such as occurs elsewhere.

The by-pass effect is achieved through not placing any significant interpretation material in the Visitor Centre and limiting the outside signs to just a relatively few panels which can be quickly browsed as people make their way from the Entry Stations to catch the shuttles. The constant stream of people going pass the centre seems to make it very difficult to justify the millions of dollars spent.

There may be some remedy when the former Visitor Centre about a mile inside the park is converted to a museum which one would expect would be based on both scientific recording and interpretation.

The features of the Zion Visitor Centre which only opened on 1 June (just a few weeks prior to our visit) are in the architectural design. It was designed in conjunction with the Department National Renewable Energy, Renewable Energies Laboratory. The most novel aspects of the design are the cooling towers which in summer draw air into the building through water soaked baffles. They have also reticulated water running around the in contour based irrigation ditches to humidify the desert atmosphere and to provide a very pleasant ambiance. They also had daylighting, passive solar walls and a roof design to be most appropriate for the seasons.

The Bryce Visitor Centre is due for early replacement it is crowded and very busy but at least all functions are combined in the one centre.

## **Concessionaires**

There is a real problem of concessionaires which exist in the parks which date back for many decades. There has already been a reference to Zion Lodge and a similar problem applies to Bryce. At Zion the original lodge burnt down and has been replaced. At Bryce Canyon the original lodge still stands and has inherited now some heritage status which means that despite its intrusiveness it is destined to remain a management problem into the foreseeable future.

Other concessionaires are mule and horse rides, stores and in some bus companies. The shuttle buses are not a concessionaire but have to tender for the right to operate. It appears the successful tenderer uses the buses during the winter in the Utah snowfields and so seems to have developed a viable business.

Another pre-existing use which the Capitol Reef National Park inherited is a small collection of fruit orchards started over a century ago by Mormon pioneers. The Parks Service employs two full time staff to tend the orchards and when the fruit is ripe such as when we were there the public was given access to the orchards where they could help themselves to fresh fruit and pay for it on an honour system. It has been deemed that the orchards are part of the cultural heritage. We had a wonderful feed of apricots for \$1 per kilogram.

## **Fire Management**

Of special interest to the situation on Fraser Island, there is now an organized program of fire management actively being pursued. Other commitments prevented a long interaction with Rick Wallen the ecologist for Bryce Canyon who was implementing the Fire Management Policy. He is sending me more details which I hope to have before the Fraser Island Fire Management Workshop on 21-23 August.

Just prior to arriving in the United States, one "controlled burn" undertaken by the United States Parks Service in New Mexico had gone badly wrong and burnt into the nuclear installation at Los Alamos. Despite this the Parks Service seems determined to press ahead with implementing its Fire Management Plan across the whole of its estate.

The aim is to restore the estate to the type of ecosystems which had been established by the Native Americans with their fire management prior to the advent of Europeans. One aim is to reduce the number of tree stems per acre to what is considered to be the pre-contact density. Another aim is to remove a woody shrubby understorey which due to the higher proportion of oil rich shrubs which have occupied the parks in the time since traditional burning and grazing ceased in the parks. The accumulation of these more volatile shrubs and the greater density of the forest is presenting some initial problems.

The Parks I visited although being in a desert environment are annually blanketed by snow. This assists in implementing controlled burns. For example, the meadow areas can be burnt while there is still snow in the forest to stop the fires entering the forest. Other criteria which are taken into account when burning include wind, the degree of slope, soil moisture, humidity and time of day. Essentially it sounded very similar to the Fire management Plan for Kakadu.

Note: Since I left the United States, the fire problems in and very close to the areas we visited have become particularly critical. This had not been foreseen as being so imminent during my visit but it had certainly been foreseen which is why the Parks Service had embarked on the program of reducing the fire risk by hazard reduction and by deliberately establishing a more sustainable forest ecosystem.

## **Road Construction**

The great American love affair with the automobile has resulted in all parks and particularly some of the more significant park features which we visited being accessible to automobiles. For example there were quite deliberate Scenic Drives constructed through each of the four National Parks. In Zion it went as far up the canyon as a vehicle could reasonably go. At Bryce Canyon it followed a long spur to the very end so that visitors could have easy access to vantage points overlooking some of the spectacular eroded features. In Capitol Reef the Scenic Drive went down a canyon and at Arches it was designed to loop around and expose a good sample of the more spectacular features. However at Arches while some of the arches were visible from the road, some such as the icon, Delicate Arch, required a hard 5 kilometres round walk to see it at its best advantage.

Perhaps the best demonstration of careful road design and construction though was at the Natural Bridges National Monument. Here the road was a one way loop taking everyone to vantage points overlooking the main natural bridges within the park.

What was impressive though of the park roads was not the accessibility of the park features, but the sensitivity of the construction. There were no quarries or other signs of road construction anywhere in the parks. The roads all had a high quality bitumen but all looked as though they had been virtually rolled out and laid in place rather than constructed in-situ. This was because there was virtually no evidence of road work extending anywhere within the parks more than 2 metres from the pavement surface.

As referred to elsewhere the Crytobionic crust on the desert surface is easily disturbed even by walking on it and takes more than 50 years to regrow and some suggest hundreds of years before it is fully restored. However I kept looking at the signs of disturbance to this crust from machinery within the park and could find no evidence of any more than 2 metres from the road whenever I check out the sites.

Road designers also paid very heavy attention to runoff and road drainage to avoid any accelerated erosion. There appeared to be no tailout drains anywhere within any park. Many of the drains were sealed to stop erosion and to avoid wide drains a system of edging was employed in places.

Most of the runoff was then deflected over a large area.

The excellence in road design and the determination to minimize impact was not just restricted to roads within the parks. Even the main highways were exemplary in avoiding impact and leaving evidence of construction such as quarries, works camps etc. within sight.

### **Volunteers In Parks (VIPs)**

From previous experiences in 1993 and 1996, I was fully prepared for the wide range of volunteers I saw working in the parks particularly in the Visitor Centres. It was summer and the peak of park visitation and happily it also coincided with the peak of the volunteer efforts.

Once again I was most impressed by the efforts made by the Golden Gate National Parks Association to recruit and utilize an army of volunteers in the Golden Gate National Recreation Area. I had a tour of the Marin County headlands and saw particularly the work of the nursery and the corps of volunteers. Last year the total effort of volunteer labour in this park was calculated at being the equivalent of 79 full time ranger staff.

The work of the nursery was so organized that two full time staff employed by the association coordinated the work of volunteers and had a range of projects ready whenever volunteers were available.

**Interns:** One of the staff was an "intern". This is a form of volunteers which doesn't yet exist in Australia. It seems that in America, working in an un-paid (or underpaid) job for a year is almost a pre-requisite to a better job eventually. It does require though (a) some support on the organization taking on the interns and (b) significant parental support to help sustain the intern during this period. One advantage of "interns" is that the organizations have the benefit of having a reliable and continuing source of work from a "volunteer" for a significant period and the advantage of knowing the person and their capabilities and adjusting more easily to fit them into the organization for usually a full year.

## **Goldman Reunion**

During the Goldman Environmental Prizewinners Reunion held last July, 2000 in San Francisco, I met 43 other laureates from 35 countries. I learnt a lot more about the projects which had helped them to earn this most prestigious prize for voluntary conservation. I also used his sponsored visit to San Francisco to explore more of the United States particularly the management of the National Park system adding to my experience in 1998 when I visited the Grand Canyon and Mesa Verde World Heritage sites. Full reports of his observations can be found on his web site: [www.sinclair.org.au](http://www.sinclair.org.au).

There are a number of observations which MOONBI readers need to appreciate and which impact directly on Fraser Island. What was of most concern was the number of issues which these amazing people were addressing and how many had some impact, albeit sometimes remote on Fraser Island.

## Fraser Island's Migratory Waders

The most significant and potentially alarming was to learn from the Korean Prize winner, Choi Yul that a Korean project to destroy and fill in the Saemangum Mud flats, tidal wetlands in Korea will certainly impact on the populations of trans-equatorial waders in Great Sandy Strait. The Saemangum Mud flats are Ramsar listed wetlands

The Korean Government proposes to build a 37 kilometre long sea wall and then convert about 40,000 hectares of what is now rich tidal mudflats into agricultural land to feed the growing Korean population. However, the mudflats are used annually by a vast population of migratory waders who nest and breed in the tundra areas of Siberia during the northern summer and then make epic flights to Australia. While some follow a route through China and others through Japan, the area proposed to be transformed is a significant stop-over point for these waders who gorge themselves in a feeding frenzy for just a few days to build up reserves for the long flight.

If this project proceeds then many birds will be weakened as a consequence and may not survive the long flight. Thus it will inevitably impact on the populations of migratory species using Great Sandy Strait. The species and the impact are not yet known but Choi Yul's Korea Federation for Environmental Movement (KFEM) which is spearheading strenuous opposition to this scheme are planning to gather more data during forthcoming migrations both to and from Australia. See KFEM's web site at [www.kfem.org](http://www.kfem.org).

While there is a Japanese Australian Migratory Bird Agreement (JAMBA) and Australia has a similar agreement with China (CAMBA) to mutually protect the birds and their habitats, there appears to be no international treaty between Australia and Korea which would protect equivalent habitats in Korea. FIDO is now urging both the Australian Government and the Korean Government to begin the development of such a dialogue and to abandon this project which will have such an adverse impact on the numbers of waders frequenting Great Sandy Strait and other Australian wetlands.

## Globalization

During the so-called "Battle of Seattle" when protesters forced a rethink of the policies and impact of the World Trade Organization (WTO), Australians were presented with media images of chaos and anarchy allegedly created by a loose coalition of environmentalists, unionists, supporters of the third world and others. The targets "victims" of this process which paralyzed the meeting were portrayed as innocent government delegations going about their lawful business. There was virtually no analysis of who were to be the ultimate beneficiaries of the business being pursued.

Since the Seattle WTO debacle where protest had to be suppressed by armed forces in the "Land of the Free" there has been a more considered reevaluation of the WTO by many agencies who are assessing the impacts of "globalization" and particularly how it is affecting the environment, poorer countries and the bulk of the world's population. It appears that there are fewer and fewer beneficiaries and the impact on the global environment is more catastrophic than we had imagined. For example, Australia now can't effectively enforce quarantine laws which had been trying to affect what Brisbane writer, Tim Low, describes in "Feral Futures". This is likely to add to the number and impact of feral pests and weeds on Fraser Island, an isolated island which has escaped much of these injurious agencies.

## Climate Change

There are other more subtle impacts of globalization such as climate change. While politicians are masters of euphemisms such as trying to address it in warm terms such as "Global Warming" or "Greenhouse Effect" which seem tolerable, the reality is that the result of all of these terms is both "**Climate Destabilization**" (a much more accurate term which defines the outcome rather than the symptoms) and Rising sea levels.

There has been much made of the impact of projected sea level changes on the Pacific Island nations where coral cays and atolls could drown. Few scientists have addressed the impact on Fraser Island. Two areas of Fraser Island, the fen country on the western side of the island and the south eastern swamps including Toolooroo, Taleebra, Govi and Gerrawea Creeks, only were established in the period between 6000 and 5,500 years before present when the sea levels fell just one metre from

the level they are expected to reach as a result of climate change to their present level. If the sea returns to its previous record high level then we can expect over the next few centuries for the sea to erode away over about 15% of the island's total area or about 24,000 hectares. It will also take with it many of the more interesting ecosystems such as the fens which scientists have just come to appreciate

Suffice to say from just these two issues that globalization does have a very significant impact on Fraser Island and while FIDO continues to fight the good fight to achieve better management of Fraser Island we can't ignore what is happening on the world stage and the impacts which they are having if not in the immediate future then on Fraser Island in the long term. Thus FIDO will continue to use its many networks with other voluntary conservation groups both within Australia and overseas to address these very important issues.

### Grand Canyon Light Rail

I made inquiries to establish what was stalling the Grand Canyon Light Rail proposal as an alternative form of public access which would reduce the impact of more than 5 million visitors annually. It appears that despite all of the work undertaken by the US Parks Service to determine and evaluate the best method of transport within the Grand Canyon National Park before deciding on the light rail as the very best option vested financial interests, namely the bus concessionaires through political and legal means have stalled the implementation by forcing a re-evaluation of the alternatives. That has now been completed and the conclusions are still the same. The light rail will now go ahead soon but in the meantime the lobbyists against it have been well rewarded by having a few extra years to reap their profits before they are finally superceded.

This seems to be a similar story to the opposition to the installation of the light rail on Fraser Island where again it is the established concessionaires who are leading the opposition to any light rail proposal.

## Conclusion

This report is not intended as a critique of either the United States National Parks or the United States Parks Service. Rather it is intended to be a reflection on some observations I made during my informal visits to a number of very superb parks encompassing some grand scenery and outstanding natural values and on areas where Australian park managers can benefit from the American experiences, both positive and negative.

The main aim of the study was to particularly relate firstly to Fraser Island and Cooloola and then to other World Heritage sites and National Parks which I regularly visit. For example, the idea of a shuttle seems particularly relevant and appropriate and most likely viable in the Mossman Gorge section of the Daintree National Park in the Wet Tropics World Heritage area.

**Appreciation:** This study tour was made possible with the support of *GO BUSH Safaris* and the Goldman Environmental Prize who enabled the travel to undertake these observation