To the Mt. Washington Commission,

a Master Plan by a group silent or silenced on global warming, not to mention overshoot, will fail to meet its obligation to protect the portion of the summit 'owned' by the State, the rest of the summit, and the planet.

A facilitator, as <u>recommended</u> by the Harvard Negotiation and Mediation Clinical Program, is desperately needed. Surely those involved in collecting weather data at the summit have something to say about climate, and this Master Plan must be based on science, not politics.

"III. Process

The Commission has attempted to set forth goals, objectives, and tactics in detail in this Master Plan. To create the Master Plan, the Commission used a process:

- Wherein Commission members trusted and respected each other.
- Wherein all Summit partners contributed to success and ultimate outcomes.
- Wherein the Summit partners recognized their interdependence but also respected their independence.
- Wherein the Summit partners ensured that the communal support that each organization gives to each other in times of need continued.
- Wherein Commission members recognized that when all Summit Partners work together, all will benefit."

This is not true. Compounding this fundamental failure of process, the Master Plan process has been predicated on defining the mountain as a passive object, without rights, and legitimately subject to the goals of the Commission members (that were heard.)

The mountain deserves standing.

"24 November 2021

Was COP26 a big waste of time? Population ecologist and <u>PM Expert Advisor</u> Prof William Rees weighs in on the major UN climate conference and points out humanity's collective failure to acknowledge and address the root cause of environmental problems: we are consuming more than the Earth can provide.

"It is a great irony, if not tragedy, that so many well-intentioned people, especially climate-focused non-government organisations and ordinary citizens wasted so much time and effort at COP26 in Glasgow. It's not that the official negotiators achieved so little, but rather that climate change is not the real existential threat, OVERSHOOT is.

Overshoot occurs when people use energy and biological resources faster than ecosystems can regenerate and pollute beyond nature's assimilative capacity. It's a meta-problem, the cause of most so-called 'environmental problems' including climate change. Overshoot means that we modern humans are consuming, polluting and destroying the biophysical basis of our own existence.

It follows that overshoot is ultimately a fatal condition. Nevertheless, the COP delegates in Glasgow didn't even acknowledge overshoot or its consequences and implications. One has to wonder whether

this is out of ignorance (it's hard to imagine that so many government scientists and advisors are unaware of overshoot) or deliberate deception – 'climate-change-as-distraction' to ensure the public remain unaware of the real threat.

Climate change/global warming is merely one important symptom of overshoot. (Climate change is a massive waste management problem – carbon dioxide is the largest entropic waste by weight of industrial economies.)

We cannot solve climate change or other major symptoms of overshoot – biodiversity loss, tropical deforestation, overfishing, land and soil degradation, pollution of everything, the possibility of pandemics, etc., in isolation from the others. However, if we reverse overshoot, all its symptoms would be alleviated simultaneously.

Proposed solutions and mainstream attempts to solve climate change, including the Green New Deal, require massive investment in high-tech non-solutions including so-called renewable electricity and unproved carbon capture and storage technologies. This approach will not reverse global warming and will worsen overshoot. Modern so-called renewable energy (RE) carriers – mostly wind turbine and solar photovoltaic (PV) electricity, but also now hydrogen – face major technical difficulties including possible materials scarcity; require massive increases in mining and refining involving fossil fuels, toxic wastes and slave/child labour; are ecologically and socially harmful; must overcome major distribution bottlenecks; occupy more space than many countries have available; and are impossible to scale up in a climate-relevant time-frame. REs are also not actually renewable, merely replaceable (15-20 year working life-span for wind turbines; 20-30 for solar panels).

Grid-scale solar PV in more northern latitudes like Canada, much of Europe and Russia is incapable of generating sufficient energy to run society. A major limitation is that capacity factors – energy actually delivered compared to name-plate capacity – are often less than 10% and the life-cycle energy return on energy invested is less than three to one). Wind is similarly unreliable in many locations – solar and wind together cannot quantitatively replace fossil fuels (FF).

In addition, wind turbines, solar panels and related infrastructure as well as electric vehicles (EVs) and all other machinery and equipment that would have to be electrified and replaced, are still manufactured using mainly fossil fuels. Even if it were viable, we cannot make the transition to carbon-free energy without FF, and this alone would soak up much of any remaining carbon budget (and some climate scientists say there is none).

Proponents should do some math. To replace 50% of global FF use with electricity by 2030 would require that the world construct approximately 1.2 times the entire present cumulative global stock of wind farms and solar panels every year for the next nine years, and this assumes one unit of electricity is equivalent to 2.7 units of fossil energy, that hard-to-electrify applications will become easy to electrify and that there will be no growth in demand or mineral supply problems. All this in a world expecting two billion more people and a 50% increase in demand for energy by 2050. This scenario cannot happen; it is an impossibility theorem, which is a good thing because if industrial humans do acquire another abundant cheap source of energy, they will use it to continue consuming, polluting and wrecking the planet.

While such unpleasantries could be avoided, on our present course, chaotic collapse is inevitable.

To begin solving this problem, we must acknowledge that the human ecological footprint, including the overshoot portion, is the product of average material consumption x population. For success, policies must address these factors directly. As long as we remain in overshoot, sustainable production and consumption means less production and consumption and reduced human populations.

This implies the need to negotiate: a) major changes in consumer lifestyles involving a 40% reduction globally in energy/material consumption per person (80% per capita in high-income countries); b) more equitable sharing of global bio-capacity and economic output; c) a global population strategy to enable a smooth, socially just descent to the one to two billion people that could live comfortably indefinitely without destroying the ecosphere. The overall goal needs to be a smaller, steady-state global economy/society of fewer people living more equitably and securely within the biophysical means of nature.

Unfortunately, lifestyle changes and population policies remain taboo subjects. And this explains why the official COP delegates in Glasgow didn't acknowledge overshoot, its consequences or implications, and why the human predicament can only worsen in years ahead."



William Rees is a population ecologist, ecological economist, Professor Emeritus and former Director of the University of British Columbia's School of Community and Regional Planning. He is a founding member and former President of the Canadian Society for Ecological Economics; a founding Director of the One Earth Initiative; and a Fellow of the Post-Carbon Institute. Prof Rees' research focuses on the biophysical requirements for sustainability and the policy implications of global ecological trends. He is perhaps best known as the originator and co-developer with his graduate students, of 'ecological footprint analysis'. EFA shows that the human enterprise is already in ecological 'overshoot' and that we would need 4.4 Earth-like planets to support just the present

world population at Canadian material standards. Such findings led to a special focus on cities as particularly vulnerable components of the human ecosystem and on psycho-cognitive barriers to ecologically rational behaviour and policy. Prof Rees has authored hundreds of peer-reviewed and popular articles on these and related topics."

At the May 20th meeting, Chair Bradley's last assessment of the relevance of global warming to the Mt. Washington State Park Master Plan was that he would not want to say that people did not have the right to go to the summit of Mt. Washington.

Faced with what might be called a physics equation, Chair Bradley responded with an assertion of first-world-individual human rights.

In a system experiencing cultural and environmental collapse, we don't have the right to engage in recreational burning of fossil fuels.

Chair Bradley, Wayne Presby, and Sarah Stewart and Phil Bryce (DNCR), backed by Governor Sununu, are committed to business as usual. They deny the existence of climate change and overshoot. DNCR is dependent on fossil-fueled recreation and promotes it aggressively. DNCR is not concerned with the rights of humans (quiet, a dust and pollution free enjoyment of their property or state property) or with the rights of the non-human; animals, plants, insects, soil. To DNCR, non-human beings, like the summit of Mt. Washington, are just objects.

WMNF also sees the public lands it is charged with protecting as without rights, only a capacity to yield money and the continuation of the agency.

The Commission needs a member to speak for the summit ecosystem. Full protection of the alpine zone, and the right of the mountain to be restored to an undamaged state conflicts with the goals of most of the representatives on the committee, and the others are unwilling to mount a serious resistance to continued exploitation and damage of the mountain.

The Master Plan needs to place the protection of the summit ecosystem (and the planet) ahead of the desire for the state to exploit it.

The Commission and its members need to acknowledge that the profits that come out of the Park, Cog and Auto Road are predicated on externalizing the environmental costs of these operations onto the rest of the world and, more immediately, the mountain; the flora, air, fauna, insects, lichens, and hikers.

The Master Plan needs to recommend downsizing the summit facilities, in light of the damage they have enabled and done to the summit with excessive and inappropriate architecture, a huge buried septic system, septic pollution, invasives, global warming, air pollution, over-use, and noise pollution. The Park is completely non-essential, except, perhaps, the observatory.

The Commission need to address the hypocrisy of its claim to offer an alpine experience while it relentlessly builds, maintains and expands infrastructure that prevents that experience. You can't have an alpine experience indoors. Even a person who brought along adequate clothing, planned their day so as not to need the summit bathroom, and brought their own food, would have their alpine experience compromised by the obliteration of much of the alpine area by concrete pavement, cars, communications towers, crowds, and a large concrete building with a cafeteria, gift shop and bathrooms. The Draft Master Plan indicates plans to further isolate visitors with "A "Summiteers" program to be a weather-related experience sponsored by MWOBS initiating visitors with wind tunnel simulation that would include a photo op (charge/donation for initiation to benefit MWOBS)" and plant displays so visitors can experience the plants. This 'quality' of the summit is captured well in the Draft Master Plan: "hikers appreciate the services offered at the Summit because they know that they will soon return to the rugged above-tree-line experience of the Presidentials." The Master Plan fails to

acknowledge those hikers that are distressed by the destruction of the alpine zone by strip architecture; those hikers who skirt the summit or simply stop going there. There was no survey of hikers presented, a survey which would have to include those that avoid the summit.

Mt. Washington State Park has, to a large degree, destroyed what it claims to offer.

The concern expressed by certain members of the committee for the handicapped was unconvincing and the Draft Master Plan does not address the degree to which a rare and threatened environment should be damaged to provide access to the disabled. There was no input by the disabled. The most impressive offering to the disabled is the Adaptive Sports Partners day where teams help people with various disabilities to make it up the Auto Road. These people are outside, limiting themselves to human power to ascend the summit.



A day for walkers on the Auto Road would be appreciated. This would enable those with the poor footing mentioned by Wayne Presby and others, to walk as far toward the summit as they are willing or able.

A day allowing access to motorized wheelchairs might be appreciated by those confined to them. One of the recent bicycle hill climbs included a cyclist with Parkinsons' who rode a battery-assisted bicycle.

"For spectators at the finish line, the most inspiring story of the day was that of Brian hall, 56, of Hampton, who has suffered from Parkinson's disease since he was 15. Despite severe movement impairments caused by the disease, Hall secured permission from the race's sponsor and beneficiary, Tim mountain Conservation Center in Albany, to compete in the Hillclimb by riding an e-bike, which contains a motor that assists the rider's pedaling efforts. Hall complete the climb in less that two and a half hours, finishing ahead of several able-bodied cyclists.

"I was shocked at how hard it was," said Hall, as he recovered from the effort. "I skied Mont Blanc in 1992. I feel the same sense of euphoria and accomplishment today – I feel like I'm reborn."

The oldest finisher was Giuseppe Marinoni, 81, of Laval, Quebec. Marinoni finished 308th overall in 1:56:31, breaking the former age-group record for men 80 and over by more than 20 minutes."

https://www.conwaydailysun.com/sports/events/vasse-pedals-to-her-fifth-title-at-auto-road/article ba81ac4c-a49b-11e8-b0cb-031deb8033d0.html

Or consider George Etzweiler:



"At the age of 98, former Penn State engineering professor George Etzweiler just became the oldest man to ever race up Mount Washington. He ran in the 57th Northeast Delta Dental Mount Washington Road Race.

"Amazing, I can't believe it," Etzweiler said. "All I do is just sit and shake my head and wonder how could I still be going now."

It took him four hours and five minutes to reach the over 6,000-foot peak.

"I'm always thrilled to see him come around the last turn," Fye said. "He's in sight, which is probably about 500 yards, and it's very steep that last stretch of the run."

 $\underline{https://wjactv.com/news/local/98-year-old-state-college-man-runs-to-top-of-mount-washington-but-heisnt-done-yet}$

There is also the issue of the correlation between cars (and presumably the Cog) and obesity, itself a disability.

WMNF and the Master Plan need to require and Environmental Impact Statement for the Park facilities, Auto Road and Cog Railway, as well as for the Cog's proposed 1,000' of construction in the Alpine Zone.

The Master Plan needs to address and reference the substantial literature on the summit and other alpine area conditions and needs.

"Habitat degradation from contamination around railway tracks (Cog railway) (Threat Rank: Medium)

The engines from the cog railway have historically caused contamination of the area surrounding the tracks, as a result of the coal-fired engines. Additionally, the installation of buried cable and fiber-optic lines adjacent to the tracks disturbed alpine vegetation and created an unvegetated zone several meters wide.

Four years after the installation of the buried cable lines along the cog railway, recovery of alpine vegetation has been extremely slow (Capers & Taylor 2014). This same study observed frequent cinders produced by coal-fired trains throughout the study area, although their effects on vegetation are unknown. The cog railway has replaced most of their coal-fired engines with biodiesel engines, eliminating the generation of new cinders, although other chemical contamination may still occur."

"Habitat degradation from snow compaction related to recreational activity Habitat degradation from recreation infrastructure that concentrates visitor impacts around facilities Habitat degradation from snow compaction related to recreational activity

Habitat degradation from recreation infrastructure that concentrates visitor impacts around facilities (AMC huts and Mt. Washington summit buildings)."

https://wildlife.state.nh.us/nongame/documents/appendixb-alpine.pdf

'We cannot regulate our interaction with any aspect of reality that our model of reality does not include"

http://www.paecon.net/

"The tourism sector's insufficient "aspirational" emission reduction strategies have been pointed out for more than a decade (Scott et al., 2010), and unfortunately the near decade old conclusion of Gössling et al. (2013, p. 534) remains valid as we embark on this decisive decade of climate action: "... no credible plan of how combinations of technological investment, management strategies, marketing, and consumer behavioral change could achieve the declared tourism sector emission reductions targets have been proffered by the UNWTO or WTTC...

Climate change is already influencing tourism sector investment, planning, operations, and demand (Scott, <u>2021</u>; WTTC, 2017), and as the strategies summarized in Table 1 illustrate clearly, the implications of the IEA, or any, net-zero scenario pose salient and largely unrecognized transition risks for tourism. Several elements of the IEA NZ scenario will influence tourism operations and investment broadly, including worldwide carbon pricing, the massive deployment of energy efficiency

technologies, and the shift to electrification dominated by renewable energy sources. Specific strategies most influential on specific components of the tourism system are described in Table 1.

https://www.tandfonline.com/

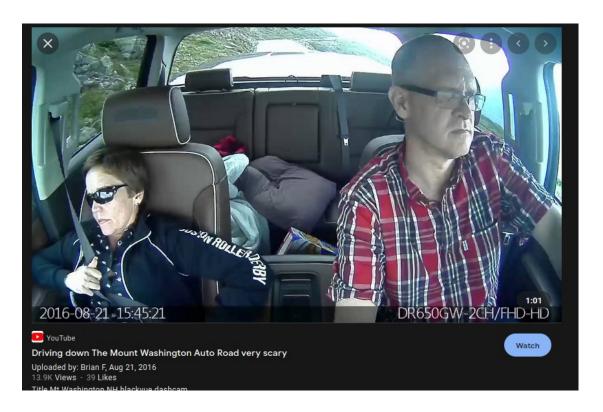
The aspirational language of the Draft Master Plan needs to be changed to language that makes the Commission and the State responsible for the condition of the Park. "Aspire", "avoid", "minimize" and "mitigate" need to be changed to "ensure that X (carrying capacity, for example,) is consistent with the best available science."

If the MWC aspires to create a world class park, it needs to look at World Heritage sites threatened by excessive visitor use:

"Yosemite is subject to a number of threats that are incrementally increasing from one year to the next. Congestion, overcrowding and over-development are confined largely to the Yosemite Valley. This is a small part of the World Heritage site (about 6%) but a critical part from the point of view of aesthetics. With excessive visitor use, the ability to experience seclusion and tranquility could diminish or even disappear in this part of the site."

https://worldheritageoutlook.iucn.org/explore-sites/wdpaid/10908

This is not an alpine experience:



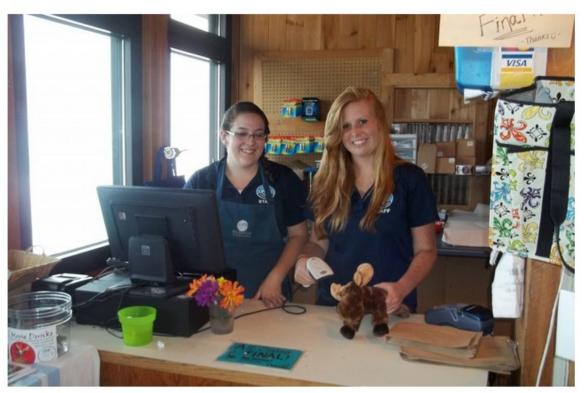
Mt Washington State Park: August 6, 2012

🛗 August 6, 2012 🙎 blogadmin 🗁 Mt Washington State Park

By: Guy Jubinville, Mt Washington State Park Staff

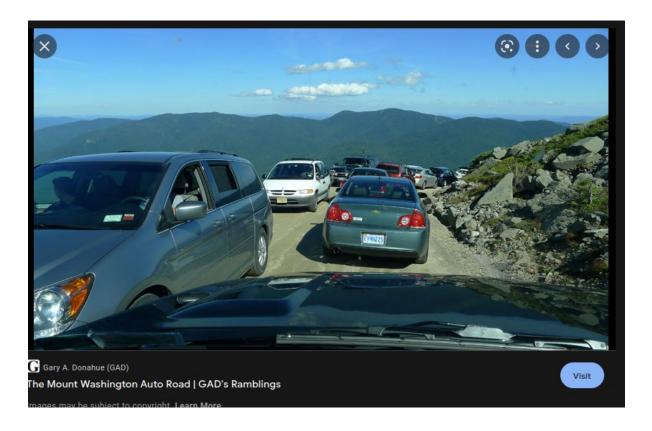
It seems that summer tourism has reached its peak here at Mt Washington State Park. The summit is full of activity with vacationers from all over the country and the world. Some hike here, some drive the Auto Road or ride the Cog Rail Way to the summit. Our Staff has been busy welcoming, answering questions, selling souvenirs, hotdogs, pizza, soups, soda and other snacks to summit guests.

On Wednesday, July 25th the snack bar and gift shop even broke a record for weekday sales.



"The gift shop generates the highest per square-foot return in the parks system."

This is not an alpine experience:



After analyzing data from national statistics measured between 1985 and 2007, Jacobson discovered vehicle use correlated "in the 99-percent range" with national annual obesity rates...

"When you are sitting in a car, you are doing nothing, so your body is burning the least amount of energy possible," he said. "And if you are eating food in your car, it becomes even worse."'

https://news.illinois.edu/view/6367/205328

"Now here's a thought to consider. Every twenty minutes on the Appalachian Trail, Katz and I walked farther than the average American walks in a week." (Bill Bryson, A Walk in the Woods.)

"And one thing in this mountain *outing (it* should rather be called an *inning)* leaves us a little pang of regret; and this is that we did not begin the tour just as we did our first one, twenty-three years ago, by walking up the Pemigewasset Valley, and thus getting those fine views of that mountain gateway, growing in wonder as one ascends, of which the new railroad to North Woodstock allows only meagre and unsatisfactory glimpses. It was a real



joy to leave the cars for the top of the old-fashioned state-coach the rest of the way into the Franconia Notch." The Index: A Weekly Paper, Volume 4; Volume 15, 1883

The Carriage Road offered slow recreation, and a degree of alpine exposure that is not available to car drivers today. It also damaged the alpine environment around it and destroyed the alpine environment under it, and a lot of mountain soil has been blown away and washed downslope.

The Auto Road and Cog Railway need to be removed, the alpine terrain restored and the mountain re-wilded. The pieces of the Cog could be sold to defray the cost. These two restoration/re-wilding projects would provide excellent studies for the time it takes a destroyed alpine zone to recover.

The auto road could be left open for a few years of non-fossil-fueled travel. As the road was depayed and narrowed over time, walkers would have an opportunity to see how slowly restoration was progressing.



http://www.adaptivesportspartners.org/sunriseascent/

The Master Plan needs to reference and incorporate existing relevant studies, for example those on alpine zone degradation and restoration:

"Some key conclusions from the various lines of evidence along Franconia Ridge:

Some management efforts have resulted in successful revegetation or reversals in decline of vegetative cover (i.e., scree walls, recovery of re-routed or abandoned trail segments), but results depend greatly on site conditions, technique, and subsequent degree of control of hiker traffic.

Active manipulation experiments to enhance recovery of alpine vegetation from the 1970s to

early 1990s such as terracing, transplanting, brush cover, native seeding, alien seeding, and fertilization in severely damaged areas has mostly not worked or not enhanced recovery over background recovery rates; one transplant success story is that Bigelow Sedge can expand into unoccupied areas from transplant plugs under the right conditions.

Full recovery of damaged alpine vegetation takes decades to a century or more to occur, averaging 1-2% gains in vegetative cover per year in the absence of active disturbance; gains made over the course of decades can be lost very rapidly with the return of foot traffic and soil erosion.

Gravelly or rocky and heavily trampled or eroded areas that have lost original organic soil material either don't recover at all, or recover very slowly regardless of technique. Many intractably damaged sites (i.e., summit zones down to bedrock) originated many decades or a century or more ago from initial recreation use, whereas some have originated more recently (within the last 20 years).'

https://www.fs.usda.gov/Internet/FSE DOCUMENTS/fseprd597400.pdf

The Draft Master Plans indicates that the Observatory and AMC members of the Commission have been silent on climate change, yet more than a year ago the Observatory staff and AMC collaborated on research showing effects of climate change on the summit:

"Mountain Washington's Response to Climate Change Now 'Statistically Significant,' Research Shows

Observatory Provides the Only Data Source for Measuring Climate Trends on White Mountain Peaks

By MWOBS Staff | December 28, 2021"

This silence suggests that the problems that led the Commission to hire the Harvard Negotiation and Mediation Clinical Program still exist and that the poltically powerful members of the Commission have refused to give up control of the process and content of the Draft Master Plan. Chair Bradley failed to engage even in the simple act of asking each member of the Commission to comment on each "Deliverable" (what would typically be called a goal or responsibility.)

The 1970 Master Plan is 107 pages long. The current Draft Master Plan is 18 pages. The 1970 Master Plan took a year and a half to write. This was before climate change and overshoot had become common knowledge. Now, with fifty years more data to incorporate, the Commission is rushing to complete a Master Plan in what appears to be half that time, and without the facilitator recommended by the Harvard group.

The Master Plan needs to be written **after** an environmental assessment has been done. DNCR's statement that the Mt. Washington Commission does not need to establish a carring capacity is wrong. DNCR is charged with protecting the natural resources of the Park. This cannot be done without a thorough third-party environmental report.

"216-A:1 Intent. -

It is the intent of the general court that a comprehensive state park system shall be developed, operated, and maintained to achieve the following purposes in order of the following priority:

I. To protect and preserve unusual scenic, scientific, historical, recreational, and natural areas within the state.

- II. To continually provide such additional park areas and facilities as may be necessary to meet the recreational needs of the citizens of all regions of the state.
- III. To make these areas accessible to the public for recreational, education, scientific, and other uses consistent with their protection and preservation.
- IV. To encourage and support tourism and related economic activity within the state."
- "Res 730.07 Restrictions in Public Use.
- (b) DRED properties, or portions of a property, shall be closed or restricted for public access by posting and /or by public notification by authorized DRED personnel if:
- **(4) It is necessary to protect the natural resources,** physical improvements, or other features and resources of a DRED property;"



There may be more demanding and exciting summits to reach along the Appalachian Trail than Mount Washington but none can be more startling. You labor up the last steep stretch of rocky slope to what is after all a considerable eminence and pop your head over the edge, and there you are greeted by, of all things, a vast, terraced parking lot, full of automobiles gleaming hotly in the sun. Beyond stands a scattered complex of buildings among which move crowds of people in shorts and baseball caps. It has the air of a world's fair bizarrely transferred to a mountaintop. You get so used along the AT to sharing summits with only a few other people, all of whom have worked as hard as you to get there, that this was positively dazzling. On Washington, visitors can arrive by car on a winding toll road or on a cog railway from the other side, and hundreds of people—hundreds and hundeds of them, it seemed—had availed themselves of these options. They were everywhere, basking in the sunshine, draped over the railings on the viewing terraces, wandering between various shops and food places. I felt for some minutes like a visitor from another planet. I loved it. It was a nightmare, of course, and a desecration of the highest mountain in the northeast, but I was delighted it existed in one place. It made the rest of the trail seem perfect.

Bill Bryson, A Walk in the Woods, 1998.



"The epicenter of activity was a monstrously ugly concrete building, the Summit Information Center...

