# **Comments on Pacoima Reservoir Restoration Project Sylmar Hang Gliding Association, Inc.**

# I. INTRODUCTION AND SUMMARY

The Sylmar Hang Gliding Association, Inc. (SHGA), a chapter of the United States Hang Gliding and Paragliding Association, Inc. (USHPA), submits its comments on the Pacoima Reservoir Restoration Project ("PRRP"). These comments are submitted to inform decision-makers

(1) of the effects the PRRP may have on the property, operations and safety of SHGA and its members on its property immediately adjacent to the Pacoima Wash, and

(2) specific aspects of the component parts of the proposal (Section V.)

The SHGA has used the property adjacent to the Pacoima Wash for landing hang gliders since 1979. The PRRP could potentially shut down flight operations at the SHGA Flight Park and destroy the value of the property for the term of the project, if not permanently. If the proposed conveyor belt is located in a way that would obstruct the landing areas on the SHGA property and in the adjacent Pacoima Wash, it could constitute a life-threatening hazard to pilots landing at the Flight Park. However, it may be possible to minimize the danger if the conveyor belt is located on the far eastern side of the Wash, and if it is low enough to the ground.

Other potentially dangerous or damaging impacts to hang gliding and paragliding may be determined to exist due to the predictably powerful convective and vertical slope-wind transport processes that occur at this precise location along the San Gabriel Mountains.

We have a vital stake in preserving sites for launching and landing. The San Gabriel Mountains are one of the few precious remaining sites where silent soaring can be practiced. The foothills of the San Gabriel Mountains have been extensively developed for residential and other uses over the past decades. The SHGA Flight Park is the only designated landing field for hang gliders and paragliders flying in the San Gabriel Mountains. The next closest landing field is Andy Jackson Flight Park, located at the base of the San Bernardino Mountains, about 65 miles east.

The property of SHGA was deeded to the SHGA as a part of the open space requirements of real estate development in the immediate area. By resolutions of the Los Angeles City Council, in 1983, it was dedicated to be a landing field for hang gliders.

The Sylmar Hang Gliding Association is one of the oldest and largest silent soaring clubs in the country, representing hundreds of pilots of hang gliders and paragliders, with members including some of the foremost pilots in the world. Pilots of hang gliders and paragliders undergo extensive flight and safety training in order to obtain their pilots' licenses. They each invest thousands of dollars in training and equipment. The SHGA is a nonprofit organization that survives on revenues from the dues and assessments from its members.. Without flight operations at the Park, there would be no members, no dues, no revenue, and SHGA would be unable to pay its real estate taxes, water bills and other utilities, would go bankrupt , lose its property and cease to exist.

# II. **DEFINITION OF TERMS**

<u>Silent soaring or Free Flight</u> – Means the sports of hang gliding and paragliding. Both are unpowered flight using only air currents to remain aloft. Flight is launched on foot, by the pilot's running forward until his speed enables his aircraft to fly. Silent soaring operations are authorized under Part 103 of the Federal Aviation Regulations (FAR), 14 Code of Federal Regulations (CFR) Part 103.

<u>Hang Glider</u> – A wing-shaped or delta-shaped, unpowered ultralight vehicle constructed of Dacron fabric and/or mylar stretched over a metal and/or composite (fiberglass or carbon fiber) frame. Although Federal Aviation Regulations (FAR) allow unpowered aircraft weighing up to 155 pounds, hang gliders typically weigh between 50 and 90 pounds. Their wingspan is typically about 30 feet, more or less. The hang glider pilot is suspended (usually head-forward) in a harness beneath the wing, within the triangular control frame, and controls the hang glider by shifting his or her weight forward, backwards and sideways. Unpowered hang gliders should not be confused with "powered ultralight vehicles," which include hang gliders powered by motors and having landing gear. **Nothing in these comments relates to any <u>powered</u> flight.** 

<u>Paraglider</u> - An unpowered ultralight vehicle resembling a parachute, constructed of Dacron fabric with no frame, with the pilot suspended, feet forward in a harness beneath the canopy. The paraglider pilot controls the paraglider by pulling on the suspension lines, called "risers" and on control lines connected to various points on the canopy. Paragliders are functionally different from skydiving parachutes, which are also "ram-air" canopies, but are usually smaller and rectangular, and are generally incapable of soaring (staying aloft on air currents). Paragliding should not be confused with "parasailing," where a large parachute-like canopy is towed by a power boat.

<u>Ultralight</u> - Under Federal Aviation Regulations, 14 CFR Part 103, hang gliders and paragliders are included in the term "ultralight vehicles, " which also includes <u>powered</u> hang gliders and powered paragliders. Except where specifically indicated, NOTHING IN THESE COMMENTS is intended to apply to the operation of any powered ultralight vehicles. **These comments apply only to unpowered hang gliders or paragliders**, which stay aloft only by air currents.

<u>USHPA</u> – United States Hang Gliding and Paragliding Association, Inc., a charitable nonprofit corporation organized under the laws of California, having its principal offices in Colorado Springs, Colorado, is the national association of pilots of hang gliders and paragliders. USHPA has chapters across the United States. USHPA has established the standards for training of hang gliding and paragliding pilots and instructors. USHPA publishes a monthly magazine containing articles concerning safety, competition, products reviews, pilot proficiency, individual pilots and their accomplishments, soaring sites, instruction, legal issues, and other subjects of interest to pilots. USHPA maintains a \$1 million liability insurance policy that indemnifies persons other than pilots against any personal injuries or property damage caused by hang gliding or paragliding. USHPA requires, as a condition of risk, and covenant not to sue with respect to injury to the person or property of that pilot in connection with hang gliding or paragliding.

<u>SHGA</u> – Sylmar Hang Gliding Association, Inc., is a nonprofit corporation organized under the laws of California, a chapter of USHPA, and owner of the Sylmar Flight Park, located at 12584 Gridley Street, Sylmar, California. SHGA is one of the oldest and largest associations of hang glider and paraglider pilots and is unique in owning its landing field property. USHPA membership is a prerequisite for flying privileges at the SHGA flight park.

## **III. BACKGROUND INFORMATION**

a. History

Hang gliding originated in Southern California in the late 1960's. Historically, a large number of sites used for hang gliding were and are in public lands, often in National Forests. In 1973, the first United States National Hang Gliding Competition took place in Sylmar, California, in the San Gabriel Mountains in Angeles National Forest, at the Sylmar 1500 launch, a site that has since been lost. The landing site has been lost because of real estate development -- Olive View Hospital was built on the property that was used as a landing zone. The use of the launch was lost when the Forest Service closed the access road because of vandalism and crime problems unrelated to hang gliding.

In the past four decades, the sport has grown, and is now represented by the USHPA. Along the way, sport parachutes evolved from hemispherical military-style paratroop canopies, to steerable skydiving chutes, and then into paragliders, frameless canopies capable of soaring, and controllable to pinpoint landings.

During that time, the equipment and pilot training have improved vastly, making the sport far safer than it was in the 1970's and early 1980's, when fatalities were not uncommon. Among other things, the USHPA has an accident reporting system that permits reports of accidents to be analyzed in its monthly magazine "Hang Gliding," so that dangerous locations, conditions, practices, and equipment can be discussed among pilots, and safety thereby improved.

Equipment and skills have improved to the point where the hang gliding distance record was set at 476 miles in 2012. The world paragliding record is 287 miles. There have been several flights from Sylmar, over 100 miles to Palm Springs. Flights between Sylmar and Andy Jackson Air Park in San Bernardino are becoming more and more frequent.

Former Councilman Zev Yaroslavsky and Former City Councilman Richard Alarcon have both flown in hang gliders to land at the SHGA flight park.

## b. The Sport of Silent Soaring and Its Participants

Participation in silent soaring requires substantial investments of time, money, and effort. To be licensed by the USHPA, pilots must train under USHPA-certified instructors. Pilot training includes piloting skills, rules of the road, safety, first aid, meteorology, Federal Aviation Regulations, USHPA regulations, aerodynamics and judgment. It includes practice launches and landings at a training hill site, as well as tandem flights with a certified tandem instructor, and supervised flights observed and controlled by an instructor on the ground in communication by radio. The minimum cost of training through proficiency level 2,<sup>1</sup> when a pilot may fly unsupervised at limited sites, is presently more than \$1,500.

A beginner's equipment, including glider, harness, altimeter/variometer<sup>2</sup>, air speed indicator, helmet and accessories typically cost a total of about \$3,000. Advanced equipment costs more than twice a beginner's equipment.

Because of the pilot's investment of time and resources, by the time he or she is permitted to fly unsupervised, there is a level of maturity and experience that is not required in other forms of recreation that is practiced in public lands.

# IV. THE SITE PRESERVATION PROBLEM

<sup>&</sup>lt;sup>1</sup> USHPA issues licenses for hang gliding and paragliding at five proficiency levels:

<sup>1 –</sup>Beginner, 2 – Novice, 3 – Intermediate, 4 – Advanced, 5 – Master. Hang glider pilots are designated H-1, H-2, etc. and paraglider pilots are designated P-1, P-2 etc.

<sup>&</sup>lt;sup>2</sup> Variometer - An instrument that tells altitude and rate of climb or descent.

Although the sky is vast, the number of sites where silent soaring can be practiced is surprisingly small. In the period 1970 – 2006, real estate development has restricted and eliminated silent soaring at most of the suitable sites, leaving only a few places where silent soaring is possible. No recreational activity has been affected by this encroachment more than hang gliding and paragliding. Here in the "wide-open" West, more and more sites are becoming closed to our use every year because of development. Rapidly diminishing numbers of suitable sites presently require us to travel for hundreds of miles, depending on the weather, to find a place to practice our sport

a. Launch Site Criteria

Mother Nature's laws permit foot-launched flight only at a surprisingly limited number of sites.

1. Lift- A launch site must have the potential to produce the lift that supports us. Because they are unpowered, our wings require a hillside launch site that either faces the wind or is heated by the sun. We soar only through the natural lift produced by the wind or thermal (heatproduced) air currents, called "thermals." Unless the site has a strong wind, blowing at right angles into a ridge (which will produce "ridge lift") it must be high enough that thermals develop below the launch site, so that a glider launching can "get on board" a rising thermal. If the glider misses the thermal, it "sinks out," unless it finds another one.

2. Nearby Landing Zone ("LZ")

Even at suitable launch sites, depending on the weather, we are frequently unable to gain any altitude because the lift may be weak or absent that day, at that site. Consequently, every suitable launch site must be close enough to a safe landing zone (LZ) so that it can be reached "on a glide" -- meaning, without any lift. Thus, the distance to an LZ should not exceed five times the difference in elevation between the launch and the LZ. Although most modern gliders have a glide ratio better than 5-to-1, we encounter "sink" (descending air currents) as often as we encounter lift. In Southern California, and particularly on the southern (facing the sun) slopes of the San Gabriel Mountains, real estate development has crowded houses right up to the mountains, eliminating vacant fields or slopes that could be used to land hang gliders. A safe LZ is one that is fairly open, and large enough so that the trees surrounding it will not create a turbulent "wind shadow" that can make landing dangerous. The safest landing for hang gliders is uphill and upwind, so that the speed over the ground is at a minimum, no faster than we can run with an 80-pound glider on our backs. Paragliders can land in smaller areas.

3. Proximity to roads

Finally, hang gliding launch sites are never in pristine, remote areas, because hang gliders weigh 60 - 80 pounds and are 14 -16 feet long when transported -- not something that can be carried long on a wooded, winding hiking trail. Practically, a hang glider launch site must be within a quarter-mile of a road. The same is true for the LZ. However, paragliders can be carried as a bulky backpack, and can be hiked in to roadless launches and out from roadless LZ's.

## b. Loss of Sites

In the past twenty years, most of the sites where hang gliding has been taught or practiced have been lost. In just the last ten years, at least ten sites have been lost in Los Angeles county alone because of real estate development and other causes. No new sites have been established.

From the launch at Mount Wilson in the Angeles National Forest,, until recently, there was <u>only</u> <u>one place</u> where it is permitted to land within a 5:1 glide of the launch, Victory Park in Pasadena, and only on pre-scheduled weekend days when, by paid permit, the Park closes two soccer fields to permit landing. That was only one LZ, unavailable at most times, in the 45 square miles surrounding mile-high Mount Wilson. That LZ also recently was lost, so that Mount Wilson is no longer available as a launch site.

In recent years, real estate development has swallowed up the LZ for the historic Lake Elsinore hang gliding site, and development is presently threatening Andy Jackson Air Park in San Bernardino.

Because sites are so scarce, we believe we must vigorously preserve those few that remain. The existence of the historic Sylmar flying site would come to an end without the continuous use of the SHGA Flight Park as a landing field.

## V. A PILOT'S LANDING APPROACH AT SYLMAR

Hang glider pilots nearly always make a "left-hand downwind-base-final" approach when landing at the Sylmar Flight Park This means that, headed downwind parallel to the runway, the pilot is relatively high over Santiago Estates and the east side of the wash, makes a U-turn to the left, and then is very close to the ground along the west side of the wash while making the final approach to the runway. For our pilots, it is essential that the west side of the wash is clear of obstructions. Conversely, structures on the east side of the wash, especially if low to the ground and close to the Santiago Estates embankment, would have little impact on hang gliding.

While hang glider pilots always intend to land on SHGA's private property, and almost infallibly do so, there are the rare instances in which a landing approach goes awry. Because a hang glider is unpowered, it cannot "go around" and make another approach. Instead, the pilot must make the safest landing possible in the circumstances, whether this is short, or long, or alongside the originally intended runway. For these uncommon landings, large clear areas in the Pacoima wash allow for safe outcomes. Hence, it would be valuable to the SHGA if the conveyor belt could be installed in a way that does not interfere the largest and flattest areas of the wash. Again, this means that routing the conveyor belt close to the base of the embankment below Santiago Estates would minimize impact to the safety of our flight park.

The SHGA would welcome any opportunity to work with LACDPW planners and surveyors as the routing of the conveyor belt is developed.

## VI. SPECIFIC COMMENTS ON SPECIFIC PHASES OF THE PROJECT

## A, Dewatering:

Portions of the Pacoima Wash that are lateral to and outside the current stream bed have been used for recreation including hang gliding activities, launches and landings for many decades. The relatively rock free sandy sediment that has existed in these areas for decades provides one of the most important resources to the safe operations of those participating in this sport.

During pre-dewatering and dewatering activities, it is important that any released water/sediment flow volume not exceed the capacity of the current channel of the Pacoima River because river flow outside the channel will inevitably erode these outlying areas, creating significant hazard to hang gliding participants as well as other recreational users.

It is also important that effective safeguards be established to prevent any sediment released from the dam, or transported southerly along the Pacoima River by any means, from clogging or diverting the channel or reducing the current flow capacity of the river as it is presently aligned. De-watering, and water releases associated with the debris removal process have the potential to deposit sediment within the current channel, raising the river bed and causing the river to overflow or significantly change its course. Any change in the course of the river as a result of this project, could render unsafe those areas used for recreation and hang gliding operations.

We respectfully request a hydrological study be conducted by the Los Angeles County Flood Control District, better to understand the potential for the negative impacts described above, and to help identify effective mitigation measures.

## B. Conveyer Belt Assembly, Operation and Partial Disassembly:

The initial part of the conveyer system may be routed over the Pacoima Dam and down the south face. One effect of elevating a large/industrial, mechanical device along the near vertical face of this steep dam or mountainside within a narrow canyon is the amplification of noise, or "megaphone effect".

As a result of this effect, in the past, construction operations involving the Pacoima Dam have produced significant levels of noise far from the dam. Sound studies should be conducted to determine the need, and measures required to address this potential impact.

Noise, public safety, access to both sides of the Pacoima Wash, should also be mitigated to provide the least negative impact. Consideration should be given to minimizing elevation changes, and turns, requiring quiet modern conveyers from contractors, and effective signage and or barriers should be specified and illustrated in the EIR.

#### C. Sediment Staging and Transport for Placement:

Sediment staging areas need to be managed during and between operations to reduce windblown dust, and the manner and methods of doing so should be identified in the EIR, including specifying the acceptable wind velocities for operations, the methods of determining and recording these wind velocities, as well as the timing and methods of responding to wind events deemed unacceptable for operations.

. The same is true for the proposed conveyor belt transport system. We feel it's important that the Draft EIR and the final EIR identify the measures that will be used to prevent these sediments from spilling, blowing, or convection from the any transport or delivery system that is used.

The EIR should address all aspects of the proposed truck transportation of sediment - - the methods of loading trucks, and transporting sediment, hours of operation, transportation schedules within the jurisdiction of the City of Los Angeles Transportation Department, noise, traffic, pollution, sediment dispersion into the atmosphere, street wear and maintenance, and disruption to businesses and residents.

#### **D.** Alternatives To Be Analyzed:

We would like to stand on record as being opposed to the project proposals or alternatives that lie on the south side of the Pacoima Dam as described, and would rather support the alternative plan to transport sediment to the north via Cougar and Maple Cyns., and sediment disposal sites to the north. We have provided no comments as to alternative plans because they are not called for in this proposal.

#### E. Effects Upon Recreation:

In addition to hang gliding, popular in and around the Pacoima Wash are hiking/jogging, bicycling, equestrian use, little league baseball, golf, and radio control aircraft flying. We expect the EIR to address the impact on each of these activities.

It is imperative that these studies identify the potential for prominent atmospheric processes such as vertical upslope winds flowing up mountain or hillside slopes, and convective transport flow, sometimes called thermals, to transport sediment and particulates upward from the storage and deliver these particulates into the atmosphere where the individual pilots of paragliders and hang gliders spend hours, daily, and hundreds of hours annually, either orbiting in or transitioning through during their long and physically demanding flights.

In addition, the very atmospheric processes that so reliably lift, support, and sustain these multihour hang glider and paraglider flights, provide an unusually enhanced environment for transporting sediments and particulates that are much lighter than these "ultralight vehicles" also being transported under the same conditions. The Environmental study should identify the potential effects these particulates, if any, might have on the pulmonary, cardiovascular, or other physiological systems of the pilots as these above mentioned atmospheric processes are enhanced at this site, and are nearly always present during hang gliding and paragliding flight operations.

Placement of sediment in either or both of the proposed canyons on the north side of the Pacoima Dam, will not provide the same level of negative impact to the in-flight activities of the hang gliders and paragliders as this impact can only occur in the presence of winds from the northern hemisphere. The vast majority of hang glider and paraglider flights from the launch site atop Kagel Mtn. occur during the presence of winds from the southern hemisphere, sometimes called onshore winds. These winds largely prevent proposed sediment in these canyons from drifting to the south and impacting these flights. For these reasons we strongly support the acquisition of these northern canyons for all future sediment storage.

#### F. Cumulative Negative Impacts:

We believe it's appropriate to recognize the cumulative negative effects of large project such as this, as well as those negative effects that are impossible to measure, such as the amount of, and effects of the sediments that are convectively transported into the atmosphere, trapped below the inversion layer, and inhaled by pilots during the thousands of pilot hours per year spent flying hang gliding above and around this project site. We request as a form of mitigation, that the county offset these cumulative effects by providing some form of socially acceptable contribution back to the community.

We propose that this be in the form of incorporating into this PRRP, and its EIR, , supportive community enhancement projects, in the following forms.

Engineering, planning, and financial support for Pacoima Beautiful's Pacoima River Vision Plan, or an like alternative if not feasible from Pacoima Beautiful, to be earmarked for that section north east of the Lopez Dam, and including a financial commitment to purchase a small parcel of land for a community natural rest area and "hang glider buffer zone" at the northern terminus of the Greenway; as well as a reasonable financial contribution to help preserve the area on both sides of the Pacoima River as a non-developable, open space, nature easement, or nature preserve, as recommended by the Los Angeles City Council District 7. (See Attachment A)

Providing the county adopt the option of disposing sediment in one or both of the described canyons north of the Pacoima Dam, which we wholeheartedly support, we anticipate the need for the county to purchase the underlying property. Since the area of land currently and historically used by the hang gliders and paragliders for launching, abuts the southern end of this canyon, and is owned by the same property owner as the canyon itself, we propose the county purchase at their expense, the land presently and historically used for hang gliding, and deed it to the hang gliders for the fee of \$10.00. Should this not be possible, or not acceptable to the Sylmar Hang Gliding Association then we propose the county purchase the above mentioned and lease it to the Sylmar Hang Gliding Association and/or their successor(s) for the annual fee of \$10.00 per year, into perpetuity.

## VII. CONCLUSION

The potential impact of the PRRP proposal for a conveyor belt as well as the proposed alternative to fill proposed North and South Canyons is to render flight operations from world famous Kagel Mountain and into our Sylmar Flight Park at the SHGA property degraded, unsafe or impracticable, and therefore to shut down flight operations there and to destroy the value of the SHGA property for its intended purpose. It could bankrupt the SHGA and put it out of existence. That impact can be mitigated only by constructing the conveyor belt component of the project as far east in the Pacoima Wash as possible and as low to the ground as possible, and to remove North and South Canyons as potential Sediment Disposal sites.

Moreover, the impacts on the Sylmar Community at large, on the river bed, on other forms of recreation, on air quality, and effects on noise levels, effects of many years of truck operation, not only in Los Angeles County, but also in the City of Los Angeles, must be thoroughly analyzed and mitigated.

Respectfully submitted:

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