



# **Program Budget**

**FISCAL YEAR 2018-2019**

**APRIL 2018**

EXHIBIT A





May 31, 2018

Blackhawk GHAD Board of Directors  
c/o Supervisor Diane Burgis  
3361 Walnut Boulevard, Suite 140  
Brentwood, California 94513

**SUBJECT:   Program Budget for Fiscal Year 2018-2019  
              Blackhawk Geologic Hazard Abatement District**

Dear Board Members:

Attached please find the proposed program budget for the Blackhawk Geologic Hazard Abatement District (Blackhawk GHAD or GHAD) for fiscal year 2018/2019. The proposed fiscal year budget totals \$3,342,500, which exceeds projected revenues and anticipates a \$717,500 deficit and the need to draw a commensurate amount from the reserve fund. At the time of this publication, it is expected that the fund balance on June 30, 2018 will be approximately \$8,204,000. A fund balance of \$7,486,500 is projected for June 30, 2019.

There are four major annual budget categories; their respective budget expenses break down as follows:

Major Projects	67.5 percent
Preventative Maintenance and Operations	16 percent
Special Projects	3 percent
Administration, Legal, Accounting	13.5 percent

As a percentage of the annual budget, for the second consecutive year, the Major Projects Program will utilize a large portion of the budget and may require modest draws from the reserve fund. The heavy rains from the 2016/2017 fiscal-year produced over 30 landslides with preliminary damage estimates totaling over \$3,000,000. All of the urgent repairs have been completed or site-stabilization has been accomplished and many of the larger landslides have been repaired. Phase 2 landslide repairs have begun and will continue throughout this fiscal year and possibly into the next fiscal year. The Blackhawk GHAD has applied to the Federal Emergency Response Agency (FEMA) for federal and state disaster area funds. FEMA damage and repair estimates include emergency response, cleanup and protective measures; as well as engineering and construction and repair costs. Earlier this year the GHAD did receive a series of denials from FEMA and we have subsequently appealed those denials. The GHAD appealed on the basis that we believe, in fact, that the GHAD is eligible. The California Office of Emergency Services (CalOES), the pass-through agency to FEMA applications has also sided with the GHAD with respect to its eligibility as an agency. At the time of this correspondence, FEMA is evaluating our appeal and we await a final decision. In addition, the district intends to install additional slope stabilization measures below Building 6 at Silver Oak Townhomes. This large-scale stabilization project will incorporate a structural tied back concrete and steel pile wall, very similar to the projects completed by the GHAD below Building 17 and Building 7. Thus far, the GHAD has not been given the required authorization from the property owner to enter the property and complete the slope stabilization project.

The Preventive Maintenance Program will focus on continued efforts to secure damaged areas and complete asset site restorations. The program will continue to upgrade and analyze these sites and the associated data collection to insure all predictive features of these instrumentation and asset sites are fully realized. Specifically, we will continue to target the following program elements - Concrete Interceptor Ditch Systems (Repair and Replace Program); the Horizontal Drains (Site Maintenance Program, and a district wide cleaning program); the Piezometers (Site Maintenance Program), and the Soil Debris Bench (Maintenance Program). The Operations Program will continue its existing monitoring profile through this period.

The Special Projects Program will be directed at continued efforts to finalize Amendment 3 to the Plan of Control which seeks to clarify the independent role of the Blackhawk GHAD and further strengthen those areas of the plan that serve to define the scope of the district's responsibilities. It is anticipated that the GHAD will continue to pursue additional studies in the areas of fiscal policy and geologic risk analyses. Approximately 3% of the annual budget has been set-aside for the Special Projects Program. We continue to work to strengthen our communication with district constituents and stakeholders within the Blackhawk community.

This budget anticipates continued strengthening and building efficiencies within the Administration Program. General legal counsel will continue to be provided by the Blackhawk GHAD Board appointed attorney, Patricia Curtin of Wendel, Rosen, Black & Dean, LLP, and specific litigation counsel will be provided by Timothy J. Ryan of Bold, Polisner, Maddow, Nelson & Judson.

The Blackhawk GHAD received a complaint, filed in Contra Costa County Superior Court (Case No. C17-00785), on April 28, 2017. The Plaintiff is Bronco Don Holdings (BDH), owners of 3800 Blackhawk Road, a one-story commercial building located within the district and part of the Blackhawk Executive Center. The Plaintiff alleges that work performed in 2014 on the GHAD project (*Silver Oak Townhomes – Building 17 Slope Stabilization Project*) damaged the BDH building by causing settlement of the building foundation. The GHAD responded by retaining geotechnical and structural engineers to investigate this claim and the experts concluded that it was unlikely that the GHAD project damaged the building foundation. The GHAD then attempted to resolve the claim through pre-litigation mediation which was unsuccessful. When plaintiff BDH filed its lawsuit, the GHAD tendered its defense of the suit to the insurance carrier that issued a policy to the GHAD and the GHAD's contractor on this project. The insurance carrier has accepted the GHAD's defense (subject to a reservation of rights) and is paying the GHAD's litigation counsel to defend the GHAD. After conducting some basic discovery, the parties have decided to again pursue mediation. Plaintiff BDH is claiming a total of \$250,000 in building damage but plaintiff's own expert concedes that the GHAD project was responsible for only one-half of this amount approximately. The mediation – now in the process of being scheduled – is expected to occur within the next ninety (90) days. If the mediation is unsuccessful, the court will assign this matter for trial sometime next year.

A summary of the expenses is shown on Table 1, pages 4, 5 and 6, followed by brief descriptions of each of the budget items on pages 7 through 17.

Respectfully yours,

**Blackhawk Geologic Hazard Abatement District**



Michael D. Sands  
Sands Construction Company, Inc.  
General Manager

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**Upon Execution: The following entities will be noticed that management will post approved Budget at [www.blackhawkghad.com](http://www.blackhawkghad.com)**

Blackhawk Homeowners Association  
4125 Blackhawk Plaza Circle, #230  
Danville, CA 94506  
Attention: Melissa Manzo

Hidden Oaks at Blackhawk  
c/o Community Care Property Management  
P.O. Box 269  
Oakley, CA 94561

Tennis Villas at Blackhawk  
c/o CMJ Associates, Inc.  
P.O. Box 190  
Pleasanton, CA 94566

Saddleback at Blackhawk  
c/o Jean Bates & Associates  
70 Railroad Avenue  
Danville, CA 94506

Silver Oak Townhomes at Blackhawk  
Canyons at Blackhawk  
c/o Bridgeport Company  
1 Annabel Lane #217  
San Ramon, CA 94583  
Attention: Bill Bavelas

Blackhawk Country Club  
599 Blackhawk Club Drive  
Danville, CA 94506  
Attention: Kevin Dunne, General Manager

## Blackhawk Geologic Hazard Abatement District Program Budget Fiscal Year 2018/2019

The following proposed line item program budget (Table 1) summarizes the anticipated expenditures for fiscal year 2018/2019 for the Blackhawk Geologic Hazard Abatement District (Blackhawk GHAD, GHAD, or District). Through an ongoing assessment, the GHAD manager evaluates and addresses geologic risk through the implementation of an annual program budget consisting of four major categories. Preceding Table 1, and directly below, please see a general overview description of the four major program elements within the budget.

### ***Major Projects Program***

The annual Major Projects Program includes landslide repair projects, drainage improvement projects and capital improvement projects necessary to either control, mitigate, or prevent landslide activity. Other large program responses necessary to implement the Plan of Control, including specific purpose studies and investigations may also be included in the Major Projects Program.

Generally, for consideration of inclusion into the Major Projects Program, a project or study would represent a level of complexity requiring plans, specifications, and comprehensive engineering analysis including modeling and research, or a project with a protracted scope such as those requiring multiple regulatory agency approvals. Most Major Projects have a projected cost that exceeds \$50,000.

Historically, the Major Projects Program has been comprised of significant landslide repair projects and other responsive large projects; at other times, it has included programmatic studies and investigations useful in generating proactive responses. This diversity of projects demonstrates the importance of a flexible Major Projects Program structure that adapts between responsive and proactive needs and capabilities to manage the dynamic nature of larger scale geologic events.

### ***Preventive Maintenance and Operations Program***

The annual Preventive Maintenance and Operations Program includes all minor repairs, cleanup, maintenance, monitoring and replacement of drainage structures and other assets that degrade over a serviceable life. The goal of preventive maintenance is to keep assets in operational condition and identify potential slope stability risks before they manifest, allowing measures to be taken to either prevent, or mitigate the impact of these hazards as defined in the Blackhawk GHAD Plan of Control.

Typical Blackhawk GHAD assets include concrete lined ditches, sub-drainage systems, groundwater measuring instrumentation, slope inclinometers and moisture gauges, and slope debris catchment features.

The Preventive Maintenance Program also includes preparations for emergency response, winterization measures including erosion protection and slope stabilization supplies, and instrument maintenance.

The Operations Program is primarily populated with scheduled instrument monitoring events. Data from these instruments are evaluated to establish risk and trends in an effort to avert landslide activity. In addition to the instruments monitoring program, the Operations Program contains the Incident Response and Community Relations Program, which incorporates comprehensive first response capabilities, and fosters community incident interaction.

### ***Special Projects***

The Blackhawk GHAD pursues ongoing and new activities identified as “Special Projects.” Special Projects include activities requested by the Board such as the Communications Program, or projects and studies designed to improve the District’s operational effectiveness and insure financial solvency. Special Projects also include utilizing new technologies to increase the efficiencies of the day-to-day operations. Establishment, testing and placing into service a new Geographic Information System (GIS) has been one of many successful fruitions of the Special Projects Program.

### ***Administration***

Administrative expenses are required to operate the Blackhawk GHAD and implement projects. Administrative expenses include personnel and consultants to manage the operations including; the General Manager, Administrative Manager, Construction Services Manager, certain clerical and accounting staff, consultants, and legal support.

With respect to the General Management of the Blackhawk GHAD - The Blackhawk GHAD Board of Directors through Resolution 2017/01, among other business, established a Consulting Services Agreement with Sands Construction Company, Inc. to act as General Manager. The payment limit established for a term through Jun 30, 2018 was \$391,200; the proposed payment limit through June 30, 2019 is \$255,600. The scope of services for the General Manager include, managing the day-to-day operations through implementation of the necessary financial recordkeeping and reporting; updating and maintaining governing documents, such as the Plan of Control; and managing and updating administrative tools such as the Reserve Study, Communications Plan, Work Program and Monthly Incident Log. The General Manager Consulting Services Agreement provides for certain administrative positions including, but not limited to, a General Manager, an Administrative Manager, a Construction Services Manager and a Network Administrator as well as overhead costs, such as office space rent, office supplies and postage. The General Manager will retain the necessary professionals, including without limitation, engineers, accounting professionals, and vendors to facilitate the operations of the GHAD. The General Manager Consulting Services Agreement and associated budget allows for the conditional use of subcontractors such as administrative sub-consultants and engineering or construction sub-consultants, within the payment limits of the Consulting Services Agreement.



With respect to the Operations Management of the Blackhawk GHAD, the Operations Manager payment limit was set at \$356,032 for a term through June 30, 2018; the proposed payment limit through June 30, 2019 is \$347,000. The scope of services for the Operations Manager include implementing the Major Projects and Preventive Maintenance Programs through forecasting work schedules and priorities; preparing Requests for Proposals and managing maintenance and repair operations within the Major Projects and Preventive Maintenance Programs. These services include project management and construction management; and preparing for and responding to emergency incidents. The Operations Manager Consulting Services Agreement provides for certain operational positions including, but not limited to; an Operations Manager, Construction Services Manager and Construction Services Technician, as well as certain overhead costs, such as, office supplies, and electronic monitoring devices testing apparatus rental. The Operations Manager Consulting Services Agreement and associated budget, allows for the conditional use of subcontractors such as contractors, engineers, and special inspectors, within the payment limits of the Consulting Services Agreement.

A summary of the proposed Fiscal-Year 2018-2019 Budget is presented in Table 1 on the following pages.

**Table 1 – Summary of Fiscal-Year 2018/2019 Budget**

Budget Item	Budget Amount	% of Total Budget
<b>Major Repairs</b>		
391 Kingswood Lane Landslide Repair Project (Partial Cost - Started FY17/18)	100,000	
Silver Oak Townhomes – Bldg 6 (Slope Stabilization Project)	565,000	
Deer Meadow Landslides (multiple) Repair Projects and Debris Wall Installation (multi-year project)	575,000	
901 Pepperwood Landslide Repair Project and Debris Wall Installation	240,000	
Blackhawk Road (near Lacrosse Field) Repair Project	250,000	
Deer Meadow Drive Storm Debris Catchment Installation	85,000	
Horizontal Drain Cleaning Program (Phase 2)	40,000	
Other Storm Event Landslides (Highest Priority Inventoried Sites)	200,000	
Landscape Replacement (associated with repairs) (Limited to no greater than 10% of repair costs)*	200,000	
<b>Total Major Projects</b>	<b>2,255,000</b>	<b>67.5%</b>

<b>Preventive Maintenance</b>		
Drainage		
Storm Drains		
Facilities	5,000	
B-58 Concrete Lined Ditches		
Maintenance/Clean/Map	36,500	
Repair and Replace	20,000	
Retention Basins	150,000	
Subdrain Systems		
Horizontal Drains	17,500	
Subdrain Outlets/Pumps	7,500	
Piezometers	10,000	
Settlement Monitors	5,000	
Minor Repairs	100,000	
Winterization	50,000	
Emergency Response	50,000	
Debris Benches	10,000	
<b>Subtotal</b>	<b>\$461,500</b>	

Budget Item	Budget Amount	% of Total Budget
<b>Operations</b>		
Piezometer Monitoring	6,000	
Horizontal Drain Monitoring	6,000	
Subdrain Monitoring	6,000	
Settlement Monitoring	5,000	
Incident Response/Community Relations	40,000	
Project Monitoring	2,000	
<b>Subtotal</b>	<b>\$65,000</b>	
<b>Total Preventive Maintenance/Operations</b>	<b>\$526,500</b>	<b>16%</b>

<b>Special Projects</b>		
Plan of Control	45,000	
Reserve Study Update	15,000	
Special Studies	10,000	
Information Technology	20,000	
Accounting Systems Upgrade	5,000	
Procedures Manual	1,000	
Communications Program	3,500	
CA Association of GHADs – Membership/Insurance	10,500	
<b>Total Special Projects</b>	<b>\$110,000</b>	<b>3%</b>

<b>Administration</b>		
Legal fees		
General Counsel	50,000	
Special Counsel		
Litigation/Legal Concerns		
Bronco Don Holdings vs. Blackhawk GHAD**	150,000	
Legal Matters/Claims	20,000	
Staffing/Administrative Support	120,000	
Accounting/Bookkeeping	92,000	
Training/Education	2,000	
Office – Rent/Supplies/Equipment/Lease	17,000	
<b>Total Administration</b>	<b>\$451,000</b>	<b>13.5%</b>

<b>TOTAL PROPOSED BUDGET FY2018/2019</b>	<b>\$3,342,500</b>	<b>100%</b>
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<b>Available Funds</b>	
Estimated Beginning Fund Balance – July 1, 2018***	8,204,000
Estimated Contributions from M-23 (M-23 Surplus)	2,343,000
Estimated Interest on Investments	282,000
Other Income	00
<b>Total Available Funds</b>	<b>\$10,829,000</b>
<b>Uses of Funds</b>	
Major Projects	2,255,000
Preventive Maintenance	526,500
Special Projects	110,000
Administrative	451,000
<b>Total Use of Funds</b>	<b>\$3,342,500</b>
<b>Estimated Reserve Available/Ending Fund Balance June 30, 2019</b>	<b>\$7,486,500</b>

\* Pursuant to the Blackhawk GHAD Plan of Control – Section H-1

\*\* Bronco Don Holdings vs. Blackhawk GHAD (3800 Blackhawk Road) – Damage Claim (Contra Costa County Superior Court – Case No. C17-00785)

\*\*\* Includes estimated accrued true-up revenue payment (Sept 2018) of \$105,235; Projected Fund Balance date of publication

## DESCRIPTION OF BUDGET ITEMS

### Major Projects

#### **391 Kingswood Lane Landslide Repair Project**

The GHAD was contacted during an intense storm and asked to respond to a site that had experienced a significant slope failure that threatened site and structural improvements. The landslide feature that occurred impacted an intensely landscaped portion of the property and potentially threatened structural elements of the home and attached structures. The site was temporarily stabilized and has been maintained during the ensuing months. Because of the unique and challenging nature of the landslide and surrounding area, the GHAD has engineered a stabilization scheme which incorporates the installation of a series of structural subterranean concrete and steel pile walls. Site demolition and structural repairs were completed in FY17/18 and the project site was secured just prior to the winter rains. Resumption of the project is project is expected to occur in June 2018 with completion in the first few months of FY18/19.



**Estimated Cost   \$100,000**

#### **901 Pepperwood Landslide Repair Project**



This series of mudflows that occurred on Pepperwood Lane serve as one of the initial responses for The GHAD as the rain events began to aggregate into the record setting rainfall that was experienced in the Danville area. Initial responses involved a late-night response to protect the downslope properties and re-establish impacted drainage facilities. Further and continual action was necessary to maintain temporary stability and functionality of the community drainage systems as further storms produced additional movement in the slides. Robust temporary winterization measures were installed, and a permanent repair scheme has been developed. Work to repair this site is expected to occur in FY18/19.

**Estimated Cost   \$240,000**

### **Deer Meadow Landslides (multiple) Repair Projects**

The Deer Meadow corridor experienced numerous and recurring mudflows as the storms began to bear down on the Blackhawk community. Efforts ensued immediately to establish emergency response measures and protective measures. However, the storms over a vast hillside presented a continued challenge to mitigate the impact of the intense rainfall. Robust temporary winterization measures were installed, and a permanent multi-phased repair scheme has been developed. Phase 1 of the work to repair this site is expected to begin in FY18/19.



**Estimated Cost \$575,000**

### **Silver Oak Townhomes – Bldg. 6** (Slope Stabilization Project)



As a result of continued monitoring of the western slope below Silver Oaks Townhomes, the GHAD has made a determination that it is advisable to install slope stability measures to prevent future movement of the slope. Engineering and construction documents have been completed to define a slope stabilization scheme similar to those utilized in the area. Work will proceed pending landowner authorization to allow access to the site.

Example - Work from Bldg. 7 Project

**Estimated Cost \$565,000**

### **Blackhawk Road (Lacrosse Field) Repair Project**



A late season landslide emerged along Blackhawk Road (near Lacrosse Field). Slide margins threaten the roadway below on Blackhawk Road. Winterization measures were taken, and design and construction documents have been generated. Work is expected to occur in FY18/19.

**Estimated Cost \$250,000**



### **Deer Meadow Drive Storm Debris Catchment**

Heavy rain events mobilized off-site debris into several storm drains, causing blockages and flooding. The Deer Meadow Drive Storm Debris Catchment Improvement will consist of a series of upstream debris catchments.



**Estimated Cost    \$85,000**

### **Horizontal Drain Cleaning Program**



Following a test program, a district-wide Horizontal Drain Cleaning Program commenced in FY17/18. The program will continue into FY18/19. A follow-up program will be formulated to determine an appropriate frequency interval for cleaning events.

**Estimated Cost    \$40,000**

### **Other Storm Event Landslides** (Highest Priority Inventoried Sites)

Beginning the evening of January 10, 2017, the Blackhawk GHAD experienced an onset of record setting rain events. Damage from these events produced over 70 Incident Responses from the GHAD and responses ranging from community drainage facilities impacted to mudflows and rotational landslides. The GHAD maintains an inventory of sites that have been and will continue to be addressed on a priority basis over the next few years. Addressing repairs have been assessed in accordance with the priority established in the Blackhawk GHAD Plan of Control and ongoing assessments by the GHAD manager.



**Estimated Cost    \$200,000**

## **Landscape Replacement**

Typically, remedial landscaping is either included in the scope of work for major projects or eliminated completely from the repair scheme depending on impact from remedial efforts to restore slope stability; however, on occasion the associated License Agreements executed in preparation of the work will address a reimbursement or allowance to the property owner for remedial landscaping installation. With as many sites and events that the Blackhawk GHAD has to attend to over the next fiscal year, we have allowed for certain, unknown at this time, landscape and structure reimbursements.



**Estimated Cost      \$200,000**

## **Preventive Maintenance and Operations**

### **Preventive Maintenance**

Preventive maintenance generally consists of those measures taken to prevent an incident or landslide event including; asset maintenance, drainage structures, instrument sites and winterization measures. Operations include ongoing monitoring programs and responses to community requests. Details of the proposed budget for each of these categories are listed below.

In deference to the unique nature and extent of the damage and response efforts necessary within the Major Projects Program this year and the work that has been completed during FY17/18, the Preventive Maintenance Program will expand modestly through this fiscal year with those tasks that are essential to maintaining slope instrumentation sites and information; data collection and other measures to insure slope stability; and resumption of discretionary programs regarding instrument site maintenance and capital expenditures.

### **B-58 Drain Systems**

***Maintenance*** – Allows for one major annual cleaning and mapping. In addition, District staff periodically walks the B-58 systems to get a first-hand account of the current conditions and project serviceable life. This information, along with other empirical data, is utilized in our Reserve Study updates. With the extreme weather conditions last



year and the related soil and vegetation load impacting the network of B-58 systems, we have anticipated and allowed for a greater effort to maintain proper drainage for these facilities over the fiscal year.

**Estimated Cost        \$36,500**

***Repair and Replacement*** – As a result of intensified efforts in recent years a total of 1508 lineal feet of B-58 was replaced and several-hundred lineal feet of B-58 was repaired. The district now currently lists approximately 284 lineal feet of significantly damaged B-58 to be repaired throughout the district. A priority has been established, based on the degree of damage and associated risk to improved properties, and a percentage of these replacement projects will be budgeted throughout the upcoming years. This year's budget will be utilized on repairs to existing B-58s on a site-by-site basis.

**Estimated Cost        \$20,000**

### **Retention Basins**

There are seven retention basins within the district boundaries. Three, unimproved retention basins are maintained exclusively by the Contra Costa County Flood Control District through CSA M-23, and the Blackhawk GHAD, as well as the property owner, performs certain periodic maintenance operations at the other four locations. In a collective agreement with the Homeowners Association, the Country Club (landowner), and the GHAD, de-siltation efforts have recently been completed in two retention basins. It is anticipated that the GHAD will participate in additional dredging projects during fiscal year 2018/2019. Currently, planning and engineering efforts are being conducted in anticipation of a multi-year dredging project on the golf course involving the three entities.

During FY 2017/2018 the GHAD management continued to engage the Contra Costa County Public Works Department (Public Works) and the Blackhawk Homeowners Association in discussions to help develop clarity as to the relative responsibilities for drainage maintenance within the GHAD. Those discussions are ongoing and have been expanded beyond the retention basin maintenance to incorporate more of the total network of storm drain systems within the district. We are greatly encouraged as these trilateral discussions continue and anticipate a more comprehensive and clear understanding of storm drain maintenance and arterial drainage system maintenance moving forward.

**Estimated Cost        \$150,000**

### **Subdrain Systems**

Outlet sites for subdrain systems must be monitored and maintenance provided to insure outlets have not been damaged or impeded. This budget will allow for an inspection and minor maintenance of these sites.

**Estimated Cost        \$5,000**

### **Horizontal Drains**

The District Manager has placed a high priority on verifying the condition of and restoring as many existing horizontal drains throughout the development as possible. A definitive list of sites requiring maintenance has been determined and work continues on restoring the sites and installing identification markers. The work this year will resume its typical maintenance operations after a one-year deferment during the heavy rains of 2017.

**Estimated Cost      \$17,500**

### **Subdrain Outlets/Pumps**

The Blackhawk GHAD conducts ongoing efforts to identify, locate and make determinations about the effectiveness of the network of subdrains throughout the District. It is anticipated that on-site restoration work may be necessary at some sites. This additional work as well as the additional introduction of the subdrain systems into the District GIS system has been incorporated into this budget item.

The GHAD maintains a subdrain pumping facility located adjacent to Hole #1 of the Lakes Course Country Club. Periodic site checks for operation are required. In recent years the equipment, instrumentation and electronics have been updated. This year, maintenance will be performed at this site to insure the continued reliability of this system and facility.

**Estimated Cost      \$7,500**

### **Piezometers**

The District reads and maintains in excess of 100 piezometers measuring ground water elevations. A definitive list of sites requiring repairs has been determined and work begun on restoring the sites and installing identification markers. The work this year has been continued to include a greater number of sites and inclusion of the sites into the GIS, and to maintain site locations.

**Estimated Cost      \$10,000**

### **Settlement Monitors**

Over time, a number of settlement monitors have been placed throughout the development. These monitors were, in large part, installed as part of a specific study and therefore are not continually monitored. Currently ongoing monitoring programs exist in several areas of the District.

**Estimated Cost      \$5,000**

### **Minor Repairs**

A budget is established annually for unanticipated minor projects within the Preventive Maintenance Program. Additionally, numerous rain-related smaller slope repair projects are in the design phase and repair efforts are expected to take place in FY2018/2019 in the various areas throughout the district.

**Estimated Cost      \$100,000**

### **Winterization**

The District provides an annual budget for procuring and storing an inventory of winterization materials and to provide for the costs of site installation. Winterization materials have been significantly depleted during the last two seasons responses. In addition, many projects needed subsequent winterization measures following last year's repair season. This year winterization measures should again rise above normal and therefore, the budget has been increased from previous years.

**Estimated Cost      \$50,000**

### **Emergency Response**

During the winter rainy season, the Blackhawk GHAD responds to a range of urgent, active, and threatening landslides as well as drainage issues where property damage is threatened. These incidents typically involve mud or debris flows, plugged storm drains at the base of slopes or flooded properties due to the overflow of runoff from plugged or damaged facilities. In severe cases these responses can require the initiation of temporary slope stabilization measures in preparation for a major repair.

**Estimated Cost      \$50,000**

### **Debris Benches**

Numerous earthen debris benches exist throughout the district. It is essential that these facilities be inspected to insure capacities and drainage have not been compromised. Annual inspections are made, and periodic debris removal plans are initiated. This year's budget allows for geotechnical evaluations and the periodic removal of accumulated debris from several of those benches identified during the study and routine monitoring events.

**Estimated Cost      \$10,000**

## **Operations**

An inventory of on-site instrumentation including hundreds of piezometers, inclinometers, horizontal drains, subdrains and settlement monuments are monitored periodically throughout the year as a preventative measure. Collected data from these sites is analyzed and aggregated into the GIS system for further analysis to establish trends.

Monitoring sites can be established for a variety of uses. Often completed repair sites require monitoring to confirm that the slope has been stabilized. Other sites have been utilized to indicate signs of unstable conditions developing and have been instrumental in determining slope conditions prior to the activation of a landslide.

Through the use of collected data such as groundwater depth, magnitude of slope movement, depth of movement, and ground surface movement, the District has been able to arrest slope movement in advance of an incipient failure. Archiving of historical data is currently being integrated into the GHAD GIS system.

Throughout the year the District receives incident response or assistance calls from property owners regarding slope stability or drainage issues. Community relations, including incident responses through the annual Operations Program, have been institutionalized as a role of Blackhawk GHAD management. All incidents are recorded within the GIS and move through the district response mechanisms as is appropriate and consistent with the Blackhawk GHAD Plan of Control.

The GHAD manager receives updates in long-range weather and oceanic temperature changes through the National Oceanic and Atmospheric Administration (NOAA) and other scientific and atmospheric agencies that track data and produce probabilistic assessments on the likelihood of seasonal heavy rain conditions.

**Estimated Cost    \$65,000**

## **Special Projects**

During fiscal year 2018-2019 the District will continue several special projects. Brief descriptions of the special projects are presented in Table 1 and further described below:

### **Plan of Control**

It is anticipated that Amendment 3 to the Plan of Control will be presented to the Board which will contain certain minor, but necessary, clarifications in the language.

**Estimated Cost        \$45,000**

### **Reserve Study Update**

The Blackhawk GHAD reserve fund study was originally completed in FY2002-2003. An extensive update to the plan was completed in fiscal year 2012-2013. The reserve study functions as a pro-forma analysis of the financial needs of the Blackhawk GHAD. It serves as a tool to calculate the annual contribution required by the GHAD to build and maintain sufficient funds for emergencies and capital replacement programs based on past weather patterns, landslide repair costs, and general attrition. Historically, as a result of severe winters, draws have been necessary on the reserve fund. Work has been completed on an independent analysis of the fund health and methodologies. This analysis has been used in updating the pro-forma plan and provides instruction to GHAD management as to the necessary reserve demands over time.

**Estimated Cost        \$15,000**

### **Special Studies**

The Blackhawk GHAD intends to continue targeted studies in the areas of fiscal policy and geologic risk. The GHAD, now in its 32<sup>nd</sup> year, has the unique opportunity to address many of the issues surrounding long-term viability and sustainability, within changing environmental and financial conditions. Using empirical data, we can assess potentially increasing financial loads and geologic risks that may accompany the maturation process of this district. We are confident that these studies have produced and will continue to produce beneficial results.

**Estimated Cost    \$10,000**

### **Information Systems and Technology**

The Blackhawk GHAD has completed an upgrade to its GIS system to include all of the GHAD's data collection and monitoring operations. The system is now fully operational and is run from internal servers, combined with secure and private "cloud" storage. The record and tool that this system offers facilitates the General Manager's ability to locate past repairs and assist in a variety of risk assessments within the District. Upgrades have now provided additional state-of-the-art security and redundancy features not historically available.

As a result of an independent evaluation of the Blackhawk GHAD's information systems conducted in 2012 and again in 2015, the GHAD has modernized its IT systems and security. Additionally, the GHAD website [www.blackhawkghad.com](http://www.blackhawkghad.com) has continued to provide a mechanism to disseminate information to our constituents.

It is anticipated that work will continue on enhancements to the GHAD GIS during this term. Work will include, incorporating access features to data and graphic representations, and improving the performance and usability of the site.

**Estimated Cost        \$20,000**

### **Accounting System Upgrade**

Periodic upgrades are necessary to enhance accounting system capabilities. The Blackhawk GHAD utilizes expense accounting software to assist in reporting and the day-to-day operation of the District. Continued accounting systems enhancements will be implemented allowing more data entry streamlining, enhanced reporting, and quality control assurance procedures, augmenting the current systems.

**Estimated Cost        \$5,000**

### **Procedures Manual**

The Blackhawk GHAD continually upgrades procedures and modifies plans to incorporate new technologies that assist the GHAD in delivering the highest level of services. Procedures require certain modifications and enhancements as new methodologies are introduced and incorporated into the GHAD Standard Operation Procedures. Certain financial and operations

procedures have been institutionalized within the program. Additional procedures will be incorporated to further define and standardize the following areas:

- Preventive Maintenance/Operations
- Communications
- Administrative Procedures

**Estimated Cost    \$1,000**

### **Communications Plan**

The Blackhawk GHAD maintains a communications plan designed to keep constituents current on GHAD operations and developments. The plan addresses several venues and mediums in which to disseminate information within this district, and to other concerned parties, and to establish clear and accessible channels for community interaction. The GHAD has now implemented a web page for public information and a multi-page informational brochure has been completed and distributed to interested Homeowner Associations (HOA) that describes the GHAD and its responsibilities and limitations. Additionally, the General Manager writes periodic articles for the HOA newsletter.

**Estimated Cost        \$3,500**

### **Outreach/Legislative Review**

#### **California Association of GHADs (CAGHADs) Membership/Insurance**

The proliferation of new GHADs within California has resulted in new legislation and adopted procedures. The Blackhawk GHAD Manager, in association with others, shares information and knowledge through a consortium of GHAD managers known as the California Association of GHADs (CAGHADs). The CAGHAD has recently obtained General Liability policies for its member GHADs. Policy premium costs have risen with new, more comprehensive, coverage for the Blackhawk GHAD and are approximately \$9,000<sup>1</sup>. Additionally, the GHAD manager participates in the CAGHADs as the organization pursues other financial instruments that may provide the Blackhawk GHAD additional options for extraordinary event financial planning. In 2016, the CAGHAD Board adopted a new fee schedule reducing the annual GHAD fees for membership by 50%.

**Estimated Cost        \$10,500**

### **Administration**

The administration of the Blackhawk GHAD includes all costs associated with legal support, office expenses, staffing, and accounting. Brief descriptions are presented below.

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<sup>1</sup> A more comprehensive policy was obtained in 2017 with a premium increase

## **Legal**

**General Counsel** – Blackhawk GHAD management must interact regularly with GHAD Counsel. The day-to-day operations of the GHAD present myriad opportunities and issues to work directly with GHAD counsel, in the areas of contracts, agreements, issues or new business to present to the Board, legislation, property owner issues, etc.

**Estimated Cost      \$50,000**

**Special Counsel** – Blackhawk GHAD management requires the services of special counsel from time to time in the areas of litigation and other legal concerns. Currently special legal counsel is representing the GHAD in a claim involving 3800 Blackhawk Road - Blackhawk Executive Center (aka: Bronco Don Holdings vs. Blackhawk GHAD)

**Estimated Cost      \$170,000**

## **Staffing/Administrative Support**

The Blackhawk GHAD staff includes the General Manager, a Construction Services Manager, an Administration Manager and frequently other support staff and consulting professionals. The General Manager administers all GHAD day-to-day operations, including financial budgeting and communications regarding its activities. The Construction Services Manager, among other tasks, administers the Major Projects and Preventive Maintenance Programs and associated work schedules, consulting and construction contracts, and documents. The administrative staff is responsible for accounting/bookkeeping, contract administration, clerical, and construction management support. Additional management staff costs are also applied to specific projects as appropriate. Authorized business expenses such as rent, office supplies and leases are included in Staffing.

**Estimated Cost      \$231,000**