



AGENDA ITEM NO. _____

SHERIFF'S OFFICE
COUNTY OF HUMBOLDT

826 FOURTH STREET
EUREKA, CALIFORNIA 95501-0516 PHONE (707) 445-7251

DATE: January 9, 2004
TO: Board of Supervisors
FROM: Gary Philp, Sheriff
SUBJECT: APPROVAL OF POLICY REGARDING SANDBAGS

For Meeting of: January 20, 2004

RECOMMENDATION:

It is recommended that the Board of Supervisors:

Approve the attached policy regarding sandbags.

DISCUSSION:

The County does not currently have a policy in place regarding the use of sand and sandbags during flooding events. While sand and sandbags are needed and used every year for minor public infrastructure protection, there is currently no extra stock of sand and sandbags available for immediate access should a significant flooding event occur. Should an extreme event occur, it is not currently possible to access any other government supplied stocks of sandbags without a significant delay. Many hours or even days could elapse before sufficient sandbag supplies would arrive in the County. In short, sufficient stocks of sandbags and access to sand should be on hand to be of any real use during extreme events.

There is presently no clearly defined procedure regarding the use of public stocks of sand and sandbags for private property protection. County responders need to have a clear guideline covering the limits of their response and the public should be made aware of those limits. The implementation of a sand/sandbag policy will significantly improve the County's emergency response structure and provide a clear guideline for future response actions.

FINANCIAL IMPACT:

Approval of this policy will not directly impact the general fund. Costs will depend on the demands placed on the County sandbag supply by extreme flood events.

OTHER AGENCY INVOLVEMENT: None.

GP:JH:kmw

Sandbags

Prepared by: Janet L. Held

CAO Approval: [Signature]

REVIEW:

Auditor _____ County Counsel _____ Personnel _____ Risk Manager _____ Other _____

TYPE OF ITEM:

☒ Consent
☐ Departmental
☐ Public Hearing
☐ Other _____

PREVIOUS ACTION/REFERRAL:

Board Order No. _____

Meeting of _____

BOARD OF SUPERVISORS, COUNTY OF HUMBOLDT
Upon the motion of Supervisor
seconded by Supervisors
and unanimously carried by those members
present, the Board hereby adopts the
recommended action contained in this report.

Dated: _____

Lora Canzoneri, Clerk of the Board

by: _____

Policy Regarding Sandbags County of Humboldt

Purpose

This will establish policies and procedures for the use of sand and sandbags for public infrastructure protection during a declared disaster or emergency. This also establishes policies and procedures for specific instances where public stocks of sand and/or sandbags can be provided for private property protection efforts.

Scope

This policy applies to all County Departments, without exception.

Policy

For normal operations and for annual preparedness efforts, on-hand stocks of sand and sandbags under County control are intended for public infrastructure protection only. The Director of Emergency Services (Sheriff) or the Board of Supervisors may, upon a "Declaration of a Local Emergency in Humboldt County", and/or during any period in which an imminent threat of extreme wide-area flooding is identified for specific locations, take action to provide available sand and/or sandbags to the residents of the unincorporated areas of the County. Any public assistance to private persons will be based on the need to mitigate the immediate effects of the emergency or disaster, will be limited to stocks not needed for public infrastructure protection, and will terminate upon cessation of the immediate threat.

Outreach Support

The Director of Emergency Services (Sheriff) and the Board of Supervisors will support public outreach actions to inform the residents of the unincorporated areas of the County of this policy and other flood-planning mitigation programs. The outreach actions will stress planning and self-reliance by individual citizens. It is important that property owners and residents prepare in advance and take the steps necessary to protect their personal property. Outreach actions can include issuing Public Safety Announcements, providing printed material stressing preparedness and proper flood fighting actions for private citizens, planning for the implementation of this policy, and partnering efforts with other governmental agencies and private organizations. A current listing of area sand and sandbag suppliers will be promulgated to the public as part of the outreach effort. That listing will be updated annually by Public Works personnel and appended to this document at its annual review.

General Procedures

During a declared emergency and at the discretion of the Director of Emergency Services (Sheriff) or the Board of Supervisors, sand and/or sandbags, in excess of that which is needed for protection of public assets and for public safety, may be

provided to the general public for emergency use. The provision of sand and/or sandbags will be terminated upon cessation of the immediate threat created by the declared emergency or disaster. Sand and/or sandbags will be provided from available County stocks and distributed at predetermined locations. During imminent emergency events and when approved by the Director of Emergency Service or the Board of Supervisors, sand and/or sandbags may be provided to the citizens of the unincorporated areas of the County subject to any restrictions placed by the order and limited to the availability of stocks on hand.

Specific Procedures – Annual Preparedness Actions and Normal Operations

The Board of Supervisors, as part of the County of Humboldt annual budget process, will review the provisions of this policy and determine the funding which will be provided for sand and/or sandbag procurement. Sufficient stocks of sand and/or sandbags will be procured by the Department of Public Works prior to the winter months to handle their expected use by the County for public infrastructure protection during declared emergency flooding events.

Specific Procedures – Disaster, State of Emergency Determination

When a state of emergency has been declared for Humboldt County by the Director of Emergency Services (Sheriff) or by the Board of Supervisors, the County may provide sand and/or sandbags from available County stocks to citizens of the unincorporated areas of the County if it is determined by the Sheriff, in consultation with the Director of Public Works, that there is excess stock beyond that which is necessary for the protection of public assets. Specific locations and procedures for sand and sandbag acquisition will be promulgated to the public at that time.

Specific Procedures – Long-term Planning by County Government

The Humboldt County Board of Supervisors have recognized the need to have sufficient stocks of sand and sandbags available for public infrastructure protection and, when possible, to assist the citizens residing in the unincorporated areas of the County. As the procurement of sand and sandbags is difficult, if not impossible, during the times of their greatest need, sufficient planning and resources should be expended to have those needed items on hand prior to the emergency event. It should be the goal of the County to have at least 100,000 sand bags on hand for public infrastructure protection prior to each winter season. Sandbags needed for private property protection could be accessed from those stocks if it is determined that the entire stock is not necessary for protection of public assets.

HOW TO

Fight Flooding At Home

How to obtain sandbags and sand PLUS how to fill them

The threat of flooding returns to Humboldt County every winter. Residents in flood prone areas need to take action well ahead of the start of rainfall by stockpiling sandbags, knowing where to get sand, knowing how to fill the bags, and then how to stack them.

It is as important to be prepared for a flood event as it is to be prepared for an earthquake or other natural disaster. The following floodfighting information has been prepared to help property owners protect their land, homes, and businesses.



Planning &



Self-Reliance

Are the Keys to Flood Preparation

Provided by:

NOAA National Weather Service
California Department of Water Resources
Humboldt County Office of Emergency Services
Humboldt County Department of Public Works
California Conservation Corps



Humboldt County Sources for:

Sandbags

A & L Feeds
2308 Central Avenue
McKinleyville
839-3265

Nilsen Company
502 Broadway
Eureka
442-3741

Nilsen Company
424 Main Street
Ferndale
786-9501

Redway Feed
290 Briceland Road
Redway
923-2765

Farm Store
3956 Jacobs Avenue
Eureka
443-7397

Main Street Feed
1635 Main Street
Fortuna
725-5565

Wildwood Feed Company
770 Wildwood Avenue
Rio Dell
764-3216

Three G's Hay and Grain
5307 Boyd Road
Arcata
826-9537

Sand

Granite Construction
Arcata, Carlotta, Scotia
441-1306

Eureka Ready Mix
4945 Boyd Road
Arcata
822-1795

Eureka Ready Mix
1955 Hilfiker Lane
Eureka
443-2791

Eureka Ready Mix
Highway 101
Alton
725-4417

Mercer Frasier
Willow Creek 530-629-2140
Fortuna River Walk Dr. 725-2326
Fortuna Dinsmore Dr. 725-2151
Dinsmore 574-6343
Cooks Valley 247-3417

Hoopa Tribal Plant
530-629-3739

Randall Sand and Gravel
Sprowel Creek Road
Garberville
923-2820

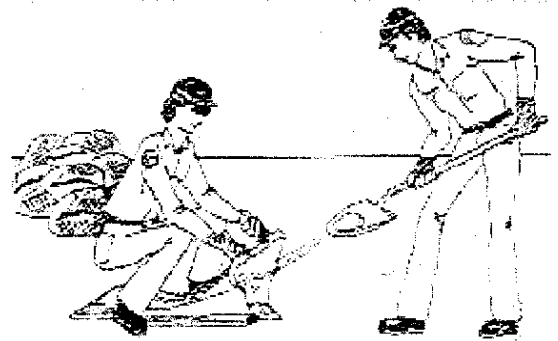
Green Wes Landscape Materials
1260 Guintolli Lane
Arcata
822-8035

Wildwood Feed Company
770 Wildwood Avenue
Rio Dell
764-3216

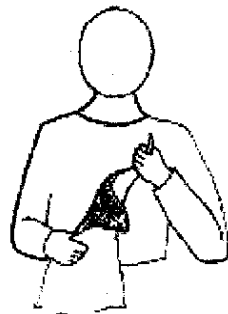
* **DISCLAIMER** The above list of companies is purely intended as informational with no implied endorsement. For further information on these companies, you will need to contact them directly. In addition, the information has been provided by the companies and individual themselves, and the government makes no claim as to the accuracy or authenticity of this information.

HOW TO: Fill a sandbag build a sandbag barrier

Work with another person, with one of you holding the bag while the other shovels sand or other material. The first shovelful is placed on the edge of the bag to keep the bag open. The bag holder should bend at the waist, with elbows resting on knees. The shoveler gets rounded scoops of sand and fills the bag to **just one-third full**. Avoid injury by not twisting while shoveling.



 Fold over the open end of the bag in a triangle to prevent sand from leaking out. Close-knit burlap bags are recommended.



 Your finished bags will look like this:

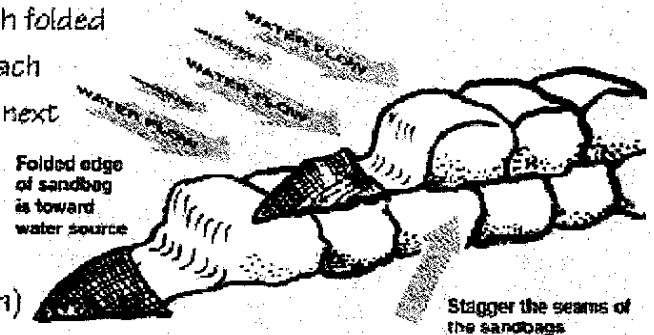


sandbag, 1/3 full, open end folded over - top view



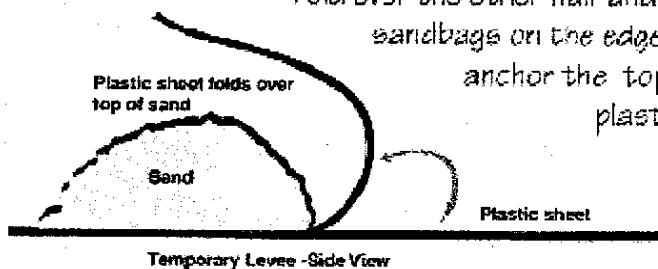
sandbag, open end folded over - side view

Place a line of bags with the folded side up, with folded edges facing the direction of water flow. Stomp each bag into place. Like you would with bricks, stagger the next layer of bags over the folded tops of the bags underneath. Stomp each layer of bags. To give the structure stability, the base should be 1.5 times wider than the height. (Example, 6 ft. wide by 4 ft. high)

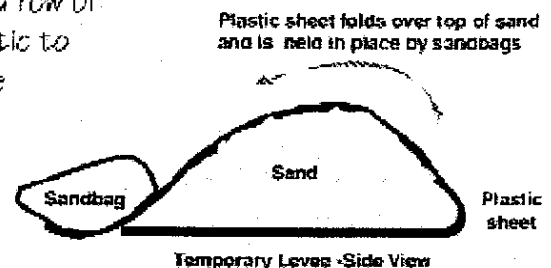


 When you don't have time to build a sandbag barrier, use a temporary levee to raise low areas. Prepare ahead by buying 20-foot-wide sheets of plastic (6-10 mil thickness). Lay out the length you need and place sand, dirt, or gravel on the half facing your property.

Fold over the other half and place a solid row of sandbags on the edge of the plastic to anchor the top edge of the plastic sheet.

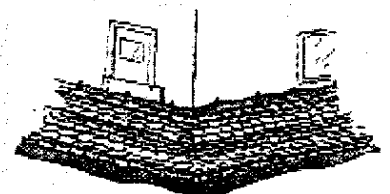


Temporary Levee - Side View



Temporary Levee - Side View

In locations where water could rise with no current, such as at lake shores, lay visquine plastic on the ground and up to walls, and form a half pyramid of sandbags. Cover doors and vents with plywood.



MANAGING A FLOOD FIGHT

Planning and management can greatly enhance the effectiveness of a flood fight. Someone should be in charge at all times. They should be coordinating the placement of supplies and the utilization of the flood fighters. They should also be watching for early signs of danger such as rising water and worker fatigue.

FLOOD FIGHT SAFETY

Working on floods involves bringing people and machinery together to combat nature's changing forces. The sense of urgency often associated with flooding combined with the inevitable fatigue makes for a dangerous combination. The tips below will help you be aware of the possible dangers in advance and plan accordingly. Ultimately, the safety of the people working to protect against flooding is much more important than the property being saved.

- **Changing River Conditions:** Rapid river rises can easily go unnoticed when your attention is diverted during sand bagging. Make sure that someone is monitoring the river conditions and ensuring that workers are not isolated by rising water. Flood fighting should be suspended when the safety of workers is compromised by rising water. Saving property is not as important as saving lives.
- **Swift Water:** High water velocities are common during flooding events. Flood fighting should not be conducted if it requires workers to be near or in swift water.
- **Animal Exposure:** Flooded areas force a variety of animals to evacuate to high ground. Workers in these areas should be aware of these animals, including reptiles, and not handle them.
- **Contamination:** Flooded areas can potentially carry high level of contaminants. Wear protective clothing to help limit contact with water, and always wash thoroughly after working around flood water.
- **Exhaustion:** The stress combined with long, physically demanding hours can take effect on the flood worker. It is very important for someone to watch for and recognize exhaustion and treat it aggressively. Rotating workers out of the most vigorous tasks, and ensuring that breaks are taken, will help eliminate fatigue factors.
- **Body Mechanics:** Care must be taken by flood fighters with regards to work conditions. Safe lifting techniques and weight distribution must be a conscious effort for every individual. Avoid lifting and twisting at the same time by arranging the location of the sand, bags, and workers to minimize the need for rotation. Flooded surfaces can be slippery and cluttered with tripping hazards. Walk slowly and take small steps. Never step into water of an unknown depth.
- **Structural Considerations:** When working around structures, be aware of downed power lines, gas/propane leaks, and unstable structure supports.
- **Safety Gear:** Rain gear, warm clothing, handheld lights, gloves, goggles, hardhat, boots, first aid kit, ropes, floatation devices, hip boots.