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sustaining and enhancing our 'āina, kai and 'ohana

KIHEI COMMUNITY ASSOCIATION POSITION STATEMENT ON
STORM WATER MANAGEMENT DURING PROJECT DEVELOPMENT
FEBRUARY, 2017

The Kihei Community Association (KCA) is concerned about comprehensive design and construction for new developments as it relates to storm water. Presently, storm water over runs many areas of south Maui even in minor storm events. Major storm events may cause loss of property, possible loss of life, and extensive environmental damage. Proper drainage design and informed construction management have the ability to mitigate the damaging effects of storm events and provide benefits to the adjacent properties and to the coastal water. Therefore, in an effort to advise developers of KCA's position on drainage as related to new development, we recommend the following:

1. Require new developments to consider capturing storm runoff for use as water supply, irrigation supply and to recharge our aquifers. Consider such measures as:
 - Use of permeable pavement for roads, parking lots and sidewalks,
 - Reduction of paved areas,
 - Use of rain gardens,
 - On-site collection of storm water for irrigation,
 - Tie roof drains into gravel French drains for ground water recharge,
 - Use of other "Green Streets Principles".
2. Design of site grading should provide slopes as flat as possible to retain the storm water on construction site.
3. Design of site grading should not divert storm water from its historical flood basin.
4. During construction, the following Best Management Practices, BMPs, are encouraged:
 - No more than one acre shall be cleared of vegetation without measures to eliminate off site sediment transport in place.
 - Silt fences shall be placed down slope from any cleared area and shall remain until the area is either landscaped or developed with structures or hardscape.
 - The silt fences shall be of sufficient height to catch all sediment flow in a storm event. Should the silt fences be over topped, additional row of fences or higher fences shall be immediately installed.
 - Silt basins shall be constructed of sufficient size to allow sediment to be captured before storm water travels off site. If there is sediment that leaves the area, the size of the basin should be increased or additional basins constructed to assure that no further sediment leaves the property.

- The use of hemp mats and sprayed fiber can be used to cover areas cleared of vegetation until construction of improvements or landscaping is in place.
- Slopes steeper than 3% that have been cleared, shall be left unprotected for no more than 48 hours at a time.
- Straw bales and straw wattles shall be used in critical storm drain areas for temporary reduction of sediment transport.
- No clearing shall be allowed during rain events of more than 0.04 inches.
- No clearing and grubbing will be allowed during the rainy period from October 1 to March 31 without approval of the county.
- Should brown water occur as a result of the storm runoff from property under construction even if the sediment comes from off the construction site, the project shall cease construction until further measures are proposed and approved by the county.

KCA position is based on the following assumptions and facts:

- Storm water in southwest Maui floods property even in minor storm events like the 2010 storm.
- Storm water carries a heavy concentration of silt which is causing damage to the near shore reefs.
- Storm water is presently diverted between historical flood basins.
- Brown water events have occurred in Maui County after even mild rain fall.
- The construction site mauka of Fleming Beach used *Maui County Best Management Practices* and failed to stop multiple brown water events that closed the beach to swimming on numerous occasions.
- There are several large projects which will be under construction in the next two years that could cause significant impact on our coastal waters.
- Recent storm water events have caused heavy concentrations of silt which is causing damage to the near shore reefs.