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Project goal:

1. Set up a HEC-HMS model of the drainage areas Wadi Bani Malik and Wadi Mraikh and their connection into a channel that leads to the Red Sea.
2. Gather Jeddah rainfall data to determine flow patterns in each drainage area
3. Determine how much flow and how fast flow will move through channels
4. Determine what must be done to improve dam and channels that are in place
5. Limit flooding of city by discovering possible alternative for water conveyance
6. Possibly convey water around the city to avoid future flooding
7. Speak to Ben Pope and discuss opportunities to improve drainage areas and channels in Jeddah
8. Determine whether current channels and dams are capable of dealing with large rainfall periods
9. View GIS maps to see land elevations of drainage area
10. Implement Storm-CAD to view flooding

Figure: Base Map of Scope of Work (Yellow circle indicates focus area)

