

LOCATION River Miles from Lees Ferry	SUMMARY OF DATA RANGES A				
	Water surface elevation B	Max. depth above water surface B	Arrival time of leading edge C	Arrival time of peak stage	Maximum discharge
-16.5 Glen Canyon Dam	3700 ft	11.0 - 21.9 ft D	0 hr	0 hr	18.0 - 18.2 (million cfs)
0.0 Lees Ferry	3115.5 ft	480 - 520 ft	0.6 - 0.7 hr	5.5 - 8.5 hr	10.0 - 14.7 (million cfs)
4.7 Navajo Bridge	3084.7 ft	470 - 630 ft	0.7 - 0.8 hr	6.6 - 6.7 hr	7.8 - 12.2 (million cfs)
87.0 Phantom Ranch	2428.5 ft	400 - 480 ft	4.0 - 5.5 hr	10 - 14 hr	7.0 - 11.4 (million cfs)
135.3 Grand Staircase	1847.5 ft	440 - 480 ft	6.5 - 8.5 hr	13 - 19 hr	6.9 - 11.2 (million cfs)
173.0 Lava Bluffs	1680 ft	360 - 430 ft	8.0 - 11.5 hr	16 - 23 hr	6.7 - 11.0 (million cfs)
225.0 Diamond Creek	1327 ft	470 - 540 ft	10.5 - 16.0 hr	19 - 27 hr	6.5 - 10.7 (million cfs)
261.6 E End of Pecos Basin	1181 ft F	246 ft G	14.5 hr	20 hr	8.7 (million cfs)

A Ranges cover extremes for both Sunny-Day Failure and Overtopping Failure as well as extremes for Manning's n roughness assumptions.

B Water surface as shown on USGS 7.5 minute quadrangle maps.

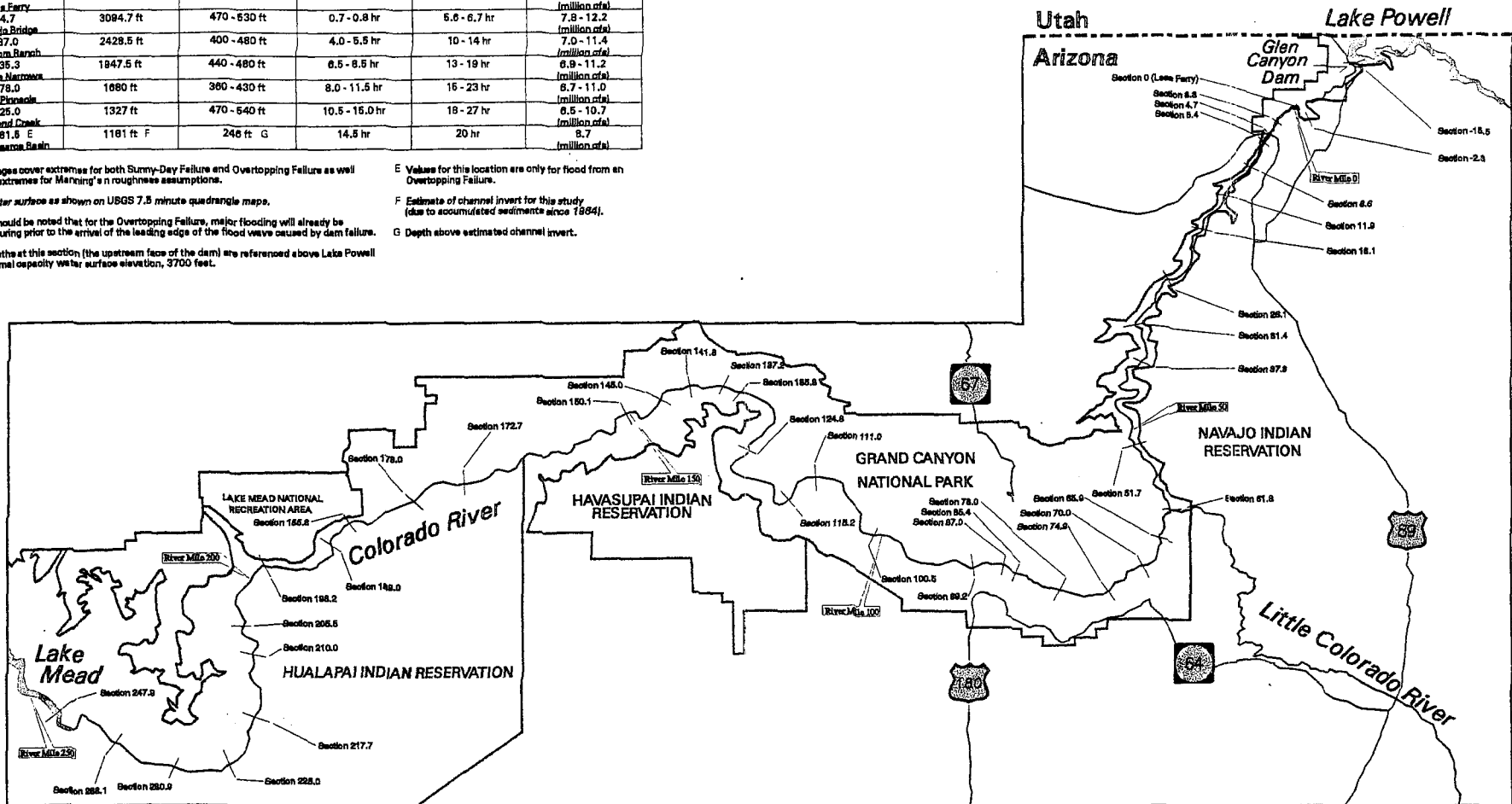
C It should be noted that for the Overtopping Failure, major flooding will already be occurring prior to the arrival of the leading edge of the flood wave caused by dam failure.

D Depths at this section (the upstream face of the dam) are referenced above Lake Powell normal capacity water surface elevation, 3700 feet.

E Values for this location are only for flood from an Overtopping Failure.

F Estimate of channel invert for this study (due to accumulated sediments since 1964).

G Depth above estimated channel invert.



INDEX OF CROSS SECTIONS USED IN DAM FAILURE STUDY

Inundation mapping of canyon areas between Glen Canyon Dam and Lake Mead were not prepared. Because of the canyon being so deep and narrow, any inundation mapping would not effectively show the severity of the flooding. The inundation boundary for a flooding depth of 450 feet would not appear much different than the boundary for a depth of 100 feet. See Table 1 above and in the study report for flooding results at selected locations in the canyon.

Cross section designation corresponds to river mile distance upstream or downstream from Lees Ferry. A positive number indicates downstream; a negative number indicates upstream.

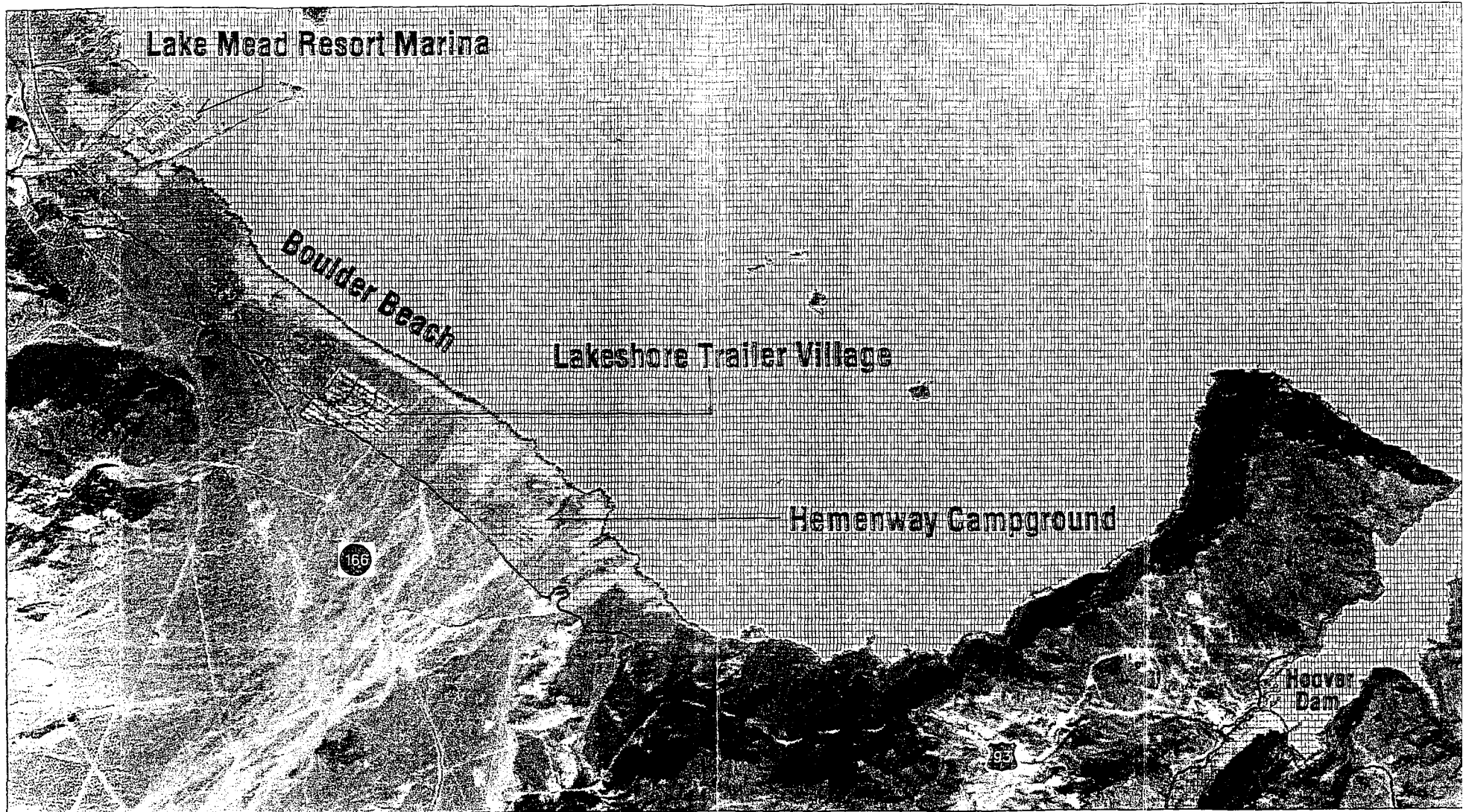
Sections 256.1 through 286.2 (in the upper reaches of Lake Mead) are not shown.

Colorado River Storage Project
Glen Canyon Dam Inundation Map
Index of Cross Sections Used in Dam Failure Study

August 1998



Scale = 1:815,000
One inch = 12.9 miles



Lake Mead Resort Marina

Boulder Beach

Lakeshore Trailer Village

Hemenway Campground

Hoover Dam

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HOOVER DAM/BOULDER BEACH AREA

Colorado River Storage Project
Glen Canyon Dam Inundation Map
Key Areas Around Lake Mead

August 1998
Sheet 1 of 10



Flood Boundary:

Flooding of Lake Mead shorelines resulting from failure of Glen Canyon Dam.

Maximum water surface elevation is 1304 feet (397 meters).



Road Symbols:

United States Highway



Secondary State Route

FLOOD VALUES:

For dam failure study, Lake Mead water surface elevation was assumed to be 1214.5 feet (for a December failure) or 1219.6 feet (for a July failure).

Failure of Glen Canyon Dam would result in the Lake Mead water level rising by approximately 85 to 90 feet.

Arrival time of leading edge: 15 to 18 hours after Glen Canyon Dam failure.

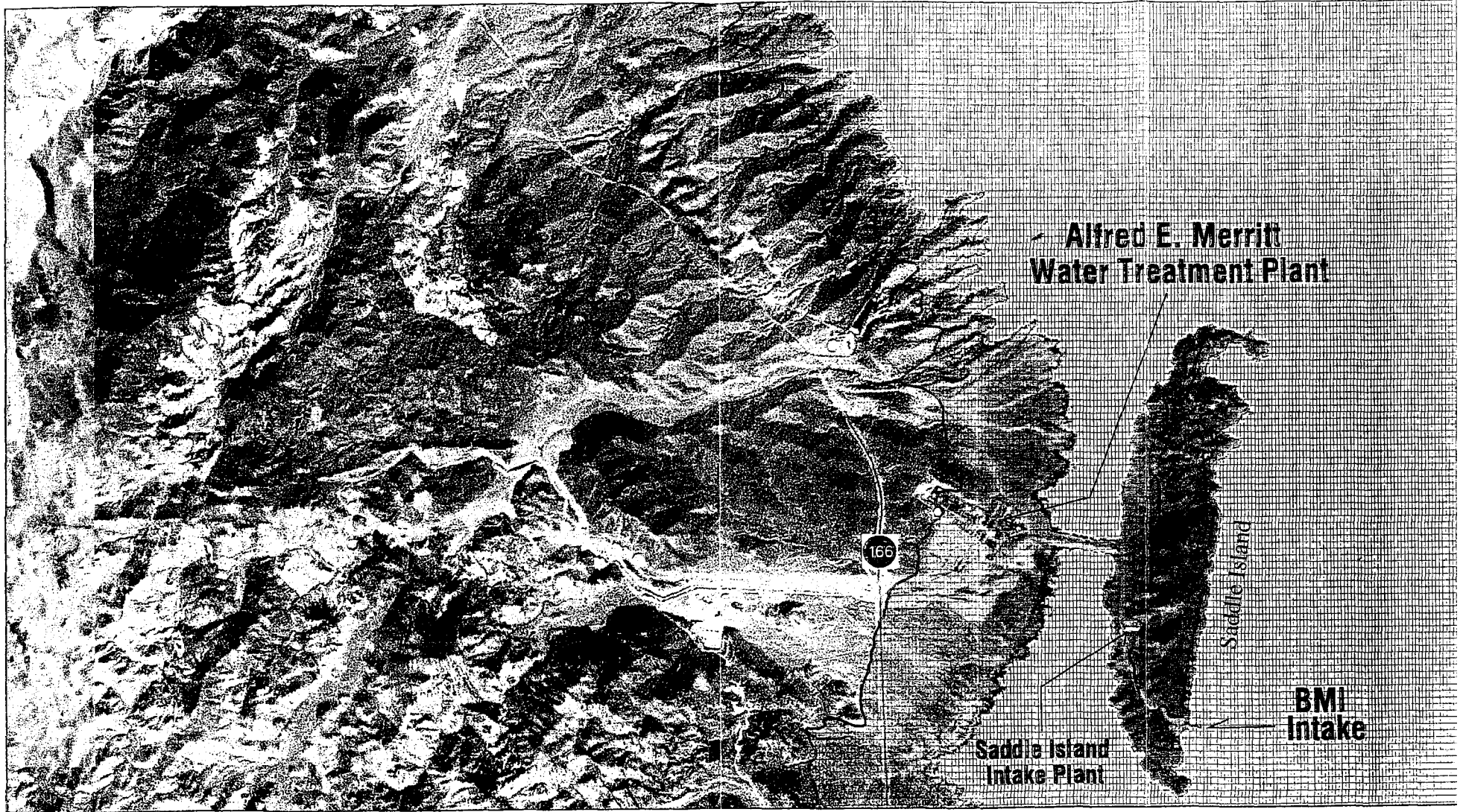
Time to maximum water surface (elevation 1304 feet): 73 to 75 hours after Glen Canyon Dam failure.

NOTE:

The inundation areas shown on this map reflect extremely rare events. Publication of this map is not intended to reflect in any way upon the integrity of Glen Canyon Dam. All inundated areas shown on this map are approximate. Mapping may not show all current dwellings or other buildings.

0 1000 2000

Scale of Feet
Scale = 1:24,000



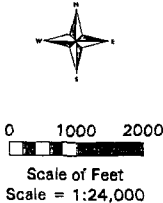
**Alfred E. Merritt
Water Treatment Plant**


Saddle Island


**Saddle Island
Intake Plant**

**BMI
Intake**

WATER TREATMENT PLANT AREA



Flood Boundary:
 Flooding of Lake Mead shorelines resulting from failure of Glen Canyon Dam.
 Maximum water surface elevation is 1304 feet (397 meters).

Road Symbols:
 Secondary State Route

FLOOD VALUES:
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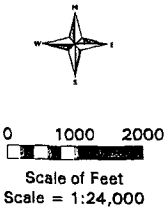
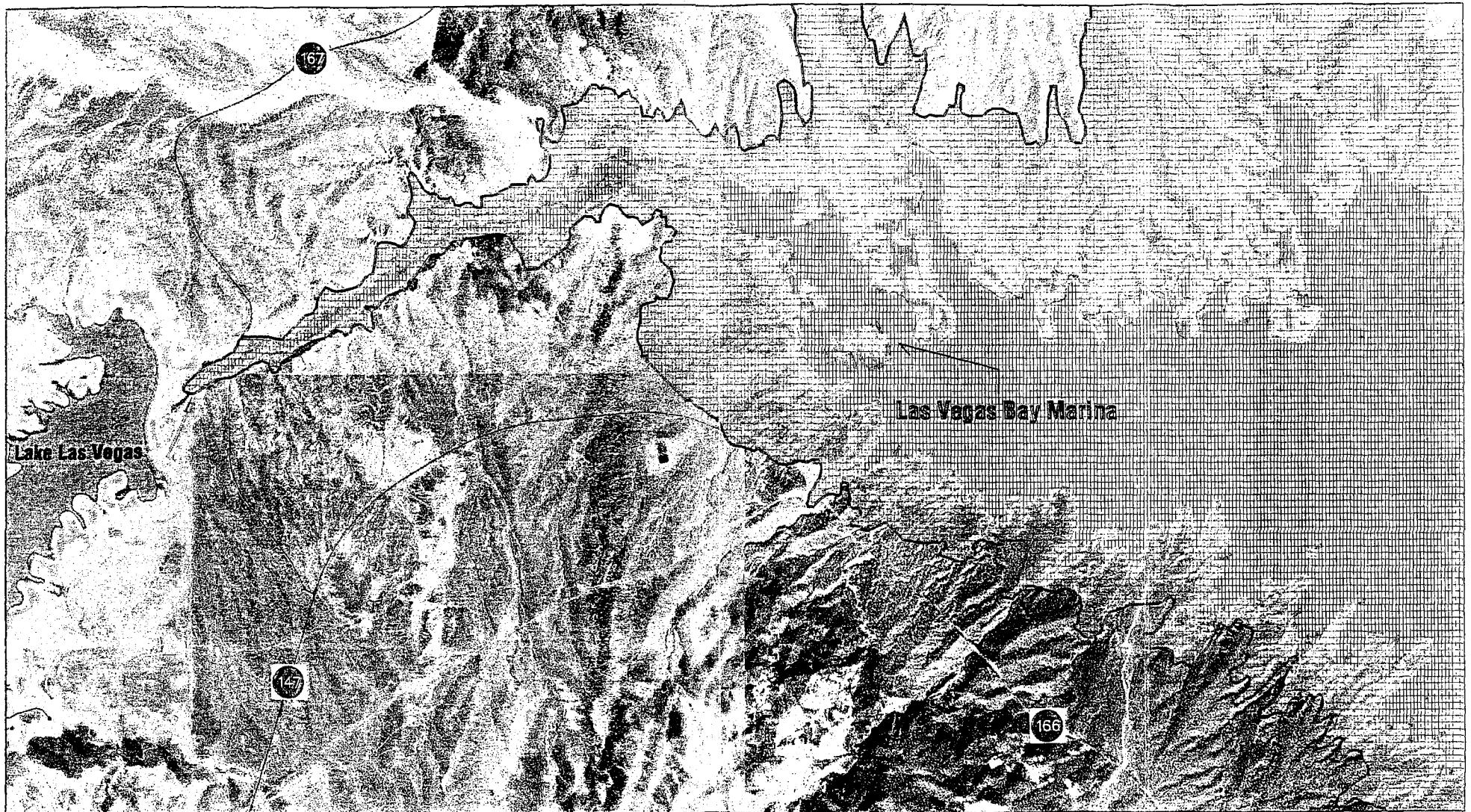
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Colorado River Storage Project
 Glen Canyon Dam Inundation Map
 Key Areas Around Lake Mead




August 1998
 Sheet 2 of 10





Flood Boundary:
 Flooding of Lake Mead shoreline resulting from failure of Glen Canyon Dam.
 Maximum water surface elevation is 1304 feet (397 meters).

Road Symbols:

-  Secondary State Route
-  Secondary State Route
-  Nevada State Highway

LAS VEGAS BAY AREA

FLOOD VALUES:
 For dam failure study, Lake Mead water surface elevation was assumed to be 1214.5 feet (for a December failure) or 1218.6 feet (for a July failure).

Failure of Glen Canyon Dam would result in the Lake Mead water level rising by approximately 85 to 90 feet.
 Arrival time of leading edge: 15 to 18 hours after Glen Canyon Dam failure.
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Colorado River Storage Project
 Glen Canyon Dam Inundation Map
 Key Areas Around Lake Mead
 August 1998
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Callville Bay Marina

CALLVILLE BAY AREA

Flood Boundary:



Flooding of Lake Mead shoreline resulting from failure of Glen Canyon Dam.

Maximum water surface elevation is 1304 feet (397 meters).

FLOOD VALUES:

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Failure of Glen Canyon Dam would result in the Lake Mead water level rising by approximately 85 to 90 feet. Arrival time of leading edge: 15 to 18 hours after Glen Canyon Dam failure. Time to maximum water surface (elevation 1304 feet): 73 to 75 hours after Glen Canyon Dam failure.

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Colorado River Storage Project
Glen Canyon Dam Inundation Map
Key Areas Around Lake Mead

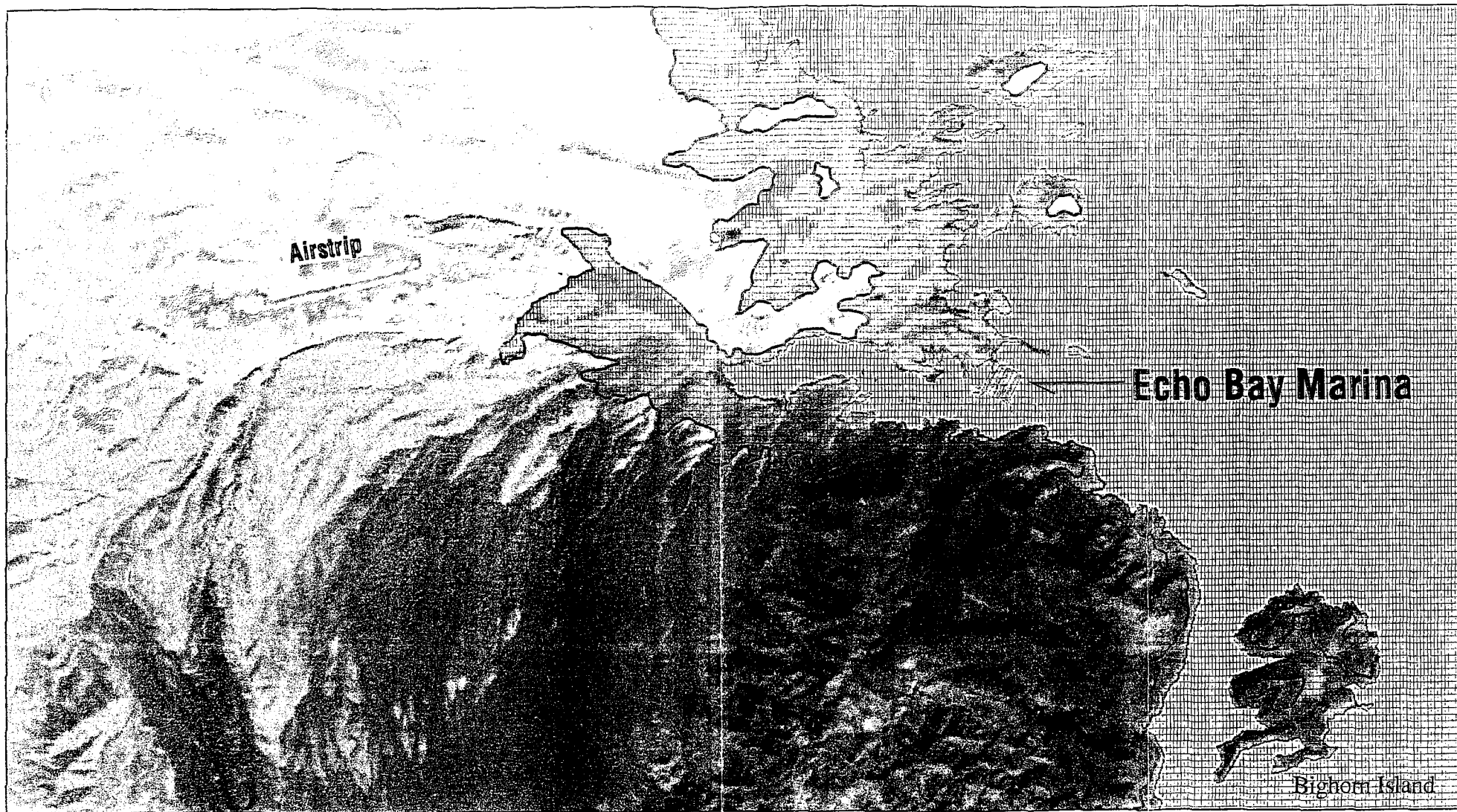
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0 1000 2000



Scale of Feet
Scale = 1:24,000



ECHO BAY AREA

Colorado River Storage Project
 Glen Canyon Dam Inundation Map
 Key Areas Around Lake Mead

August 1998
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Flood Boundary:

Flooding of Lake Mead shoreline
 resulting from failure of
 Glen Canyon Dam.

Maximum water surface elevation
 is 1304 feet (397 meters).

FLOOD VALUES:

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Failure of Glen Canyon Dam would result in the Lake Mead water level rising by approximately 85 to 90 feet.
 Arrival time of leading edge: 15 to 18 hours after Glen Canyon Dam failure.
 Time to maximum water surface (elevation 1304 feet): 73 to 75 hours after Glen Canyon Dam failure.

NOTE:

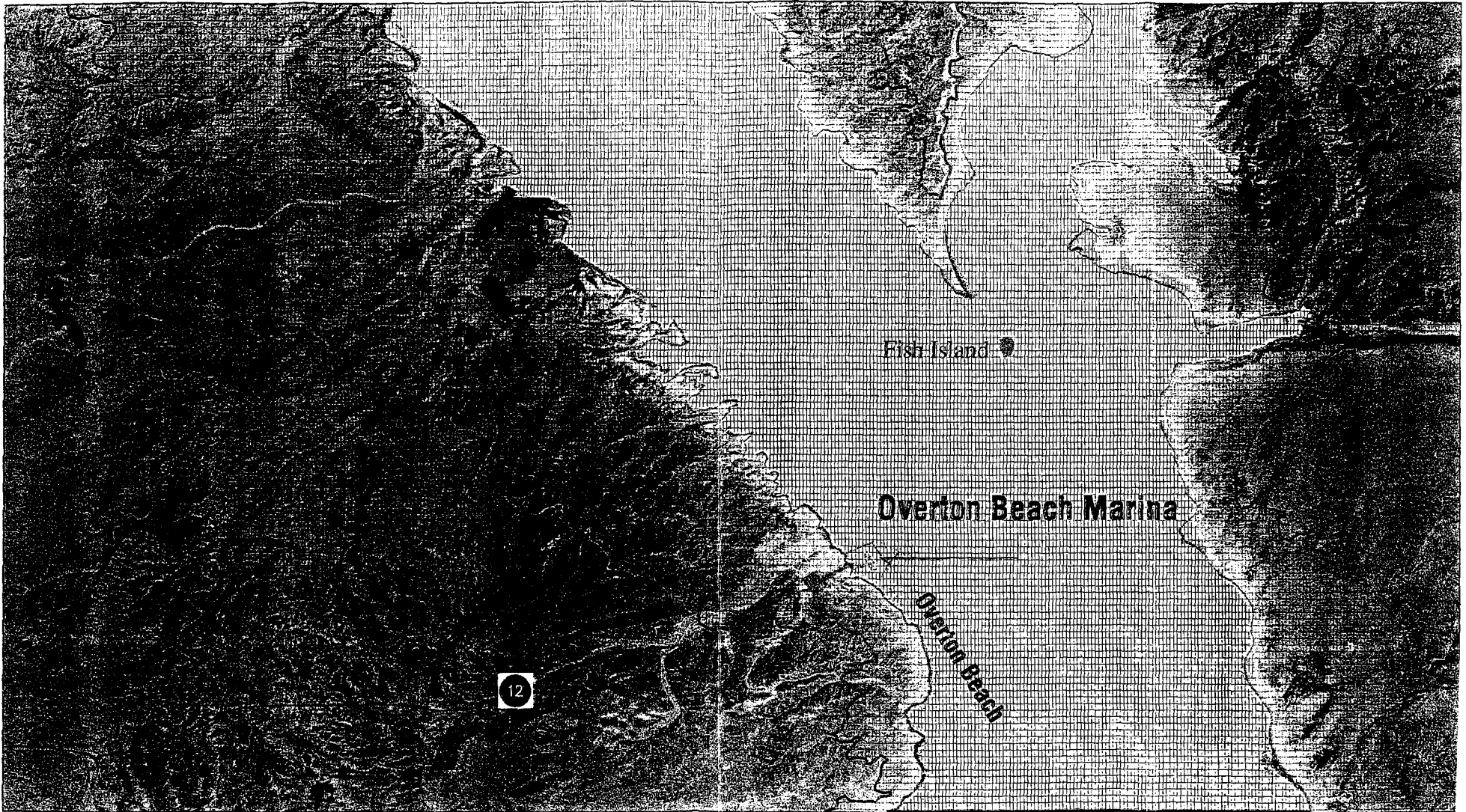
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0 1000 2000



Scale of Feet
 Scale ≈ 1:24,000



0 1000 2000

Scale of Feet
Scale = 1:24,000



Flood Boundary:
Flooding of Lake Mead shoreline
resulting from failure of
Glen Canyon Dam.
Maximum water surface elevation
is 1304 feet (397 meters).



Road Symbols:
Secondary State Route

OVERTON BEACH AREA

FLOOD VALUES:
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Arrival time of leading edge: 15 to 18 hours after Glen Canyon Dam failure.
Time to maximum water surface (elevation 1304 feet): 73 to 75 hours after Glen Canyon Dam failure.

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Glen Canyon Dam Inundation Map
Key Areas Around Lake Mead

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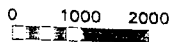




Flood Boundary:
 Flooding of Lake Mead shoreline
 resulting from failure of
 Glen Canyon Dam.



Road Symbols:
 Nevada State Highway



Scale of Feet
 Scale = 1:24,000

Maximum water surface elevation
 is 1304 feet (397 meters).

MOUTH OF MUDDY RIVER

FLOOD VALUES:
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 or 1219.6 feet (for a July failure).

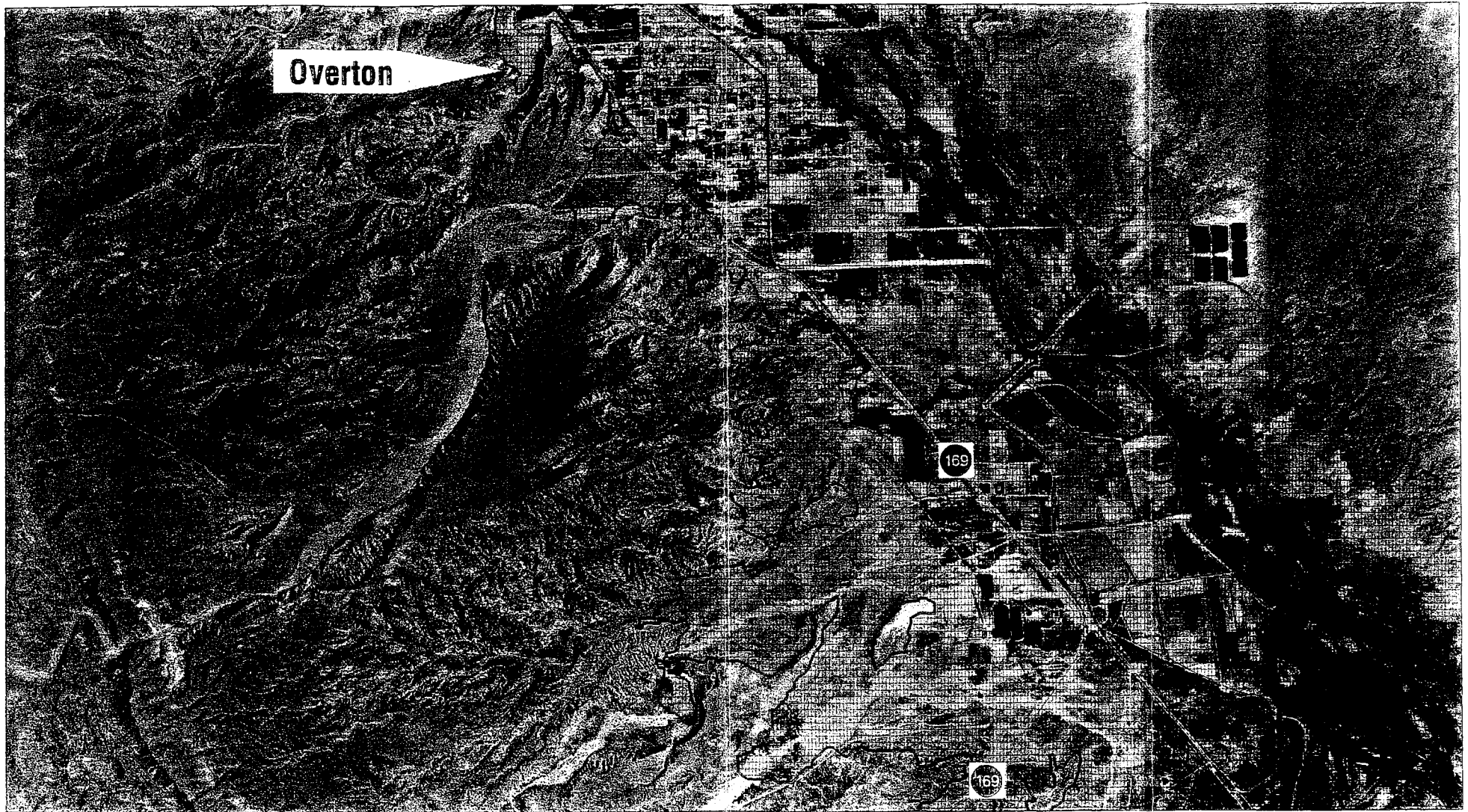
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 Arrival time of leading edge: 15 to 18 hours after Glen Canyon Dam failure.
 Time to maximum water surface (elevation 1304 feet): 73 to 75 hours after Glen Canyon Dam failure.

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 Glen Canyon Dam Inundation Map
 Key Areas Around Lake Mead

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Overton

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COMMUNITY OF OVERTON (SOUTH)

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Glen Canyon Dam Inundation Map
Key Areas Around Lake Mead

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Flood Boundary:
Flooding of Lake Mead shoreline
resulting from failure of
Glen Canyon Dam.

Maximum water surface elevation
is 1304 feet (397 meters).

Road Symbols:

Nevada State Highway

FLOOD VALUES:

For dam failure study, Lake Mead water surface elevation was assumed to be 1214.5 feet (for a December failure) or 1219.6 feet (for a July failure).

Failure of Glen Canyon Dam would result in the Lake Mead water level rising by approximately 85 to 90 feet.
Arrival time of leading edge: 15 to 18 hours after Glen Canyon Dam failure.
Time to maximum water surface (elevation 1304 feet): 73 to 75 hours after Glen Canyon Dam failure.

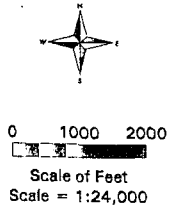
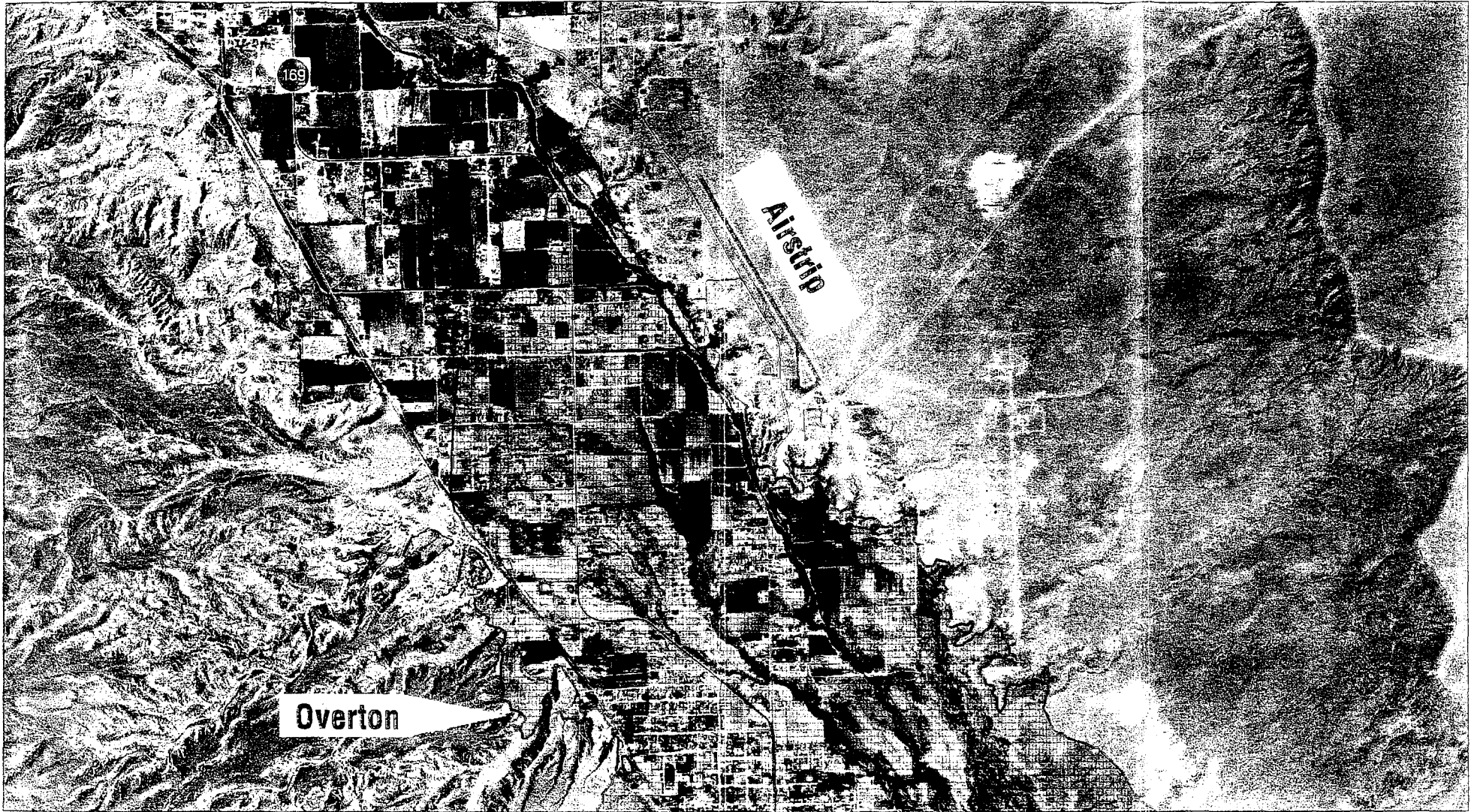
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0 1000 2000



Scale of Feet
Scale = 1:24,000



Flood Boundary:



Flooding of Lake Mead shoreline resulting from failure of Glen Canyon Dam.

Maximum water surface elevation is 1304 feet (397 meters).

Road Symbols:



Nevada State Highway

COMMUNITY OF OVERTON (NORTH)

FLOOD VALUES:
 For dam failure study, Lake Mead water surface elevation was assumed to be 1214.5 feet (for a December failure) or 1219.6 feet (for a July failure).

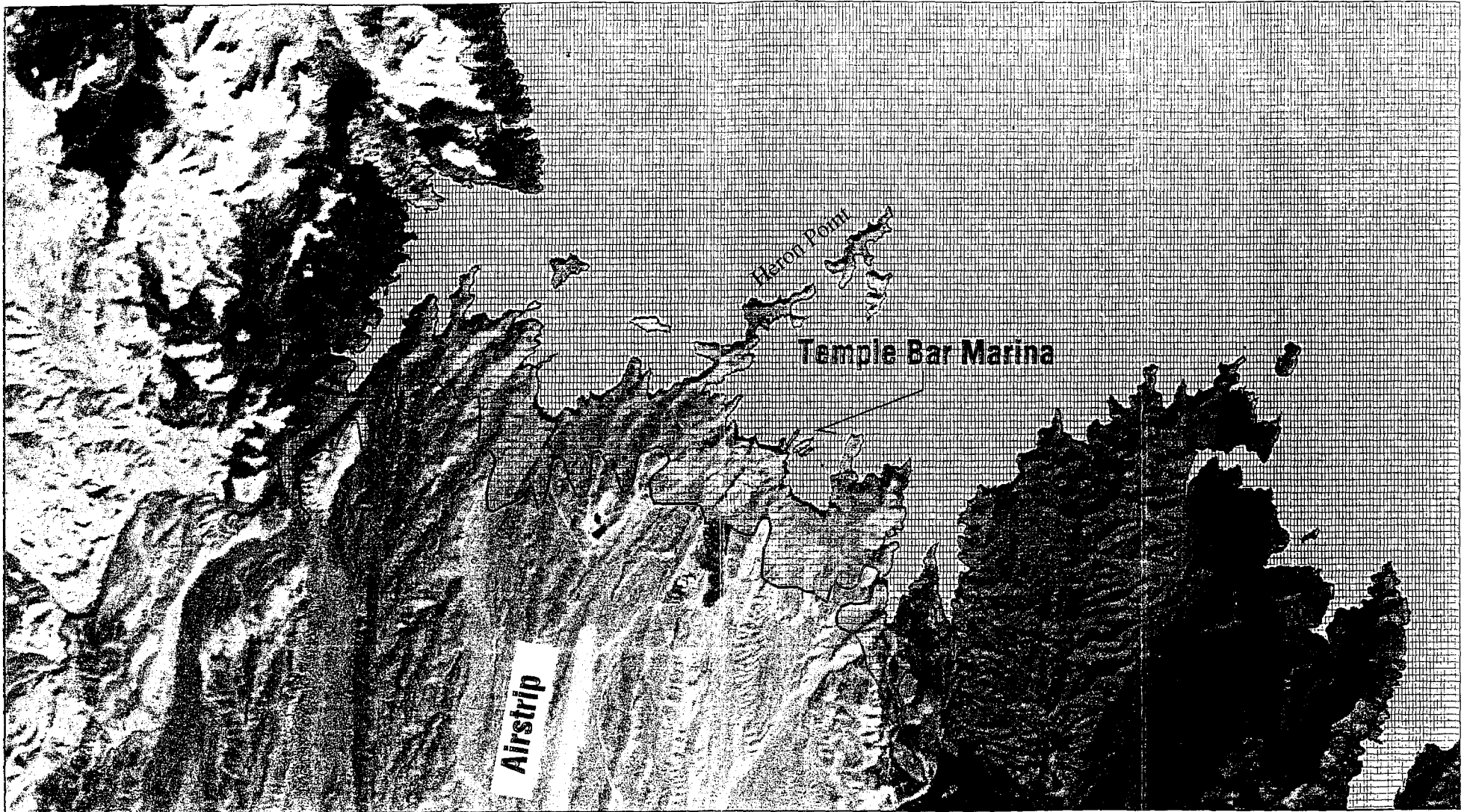
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 Glen Canyon Dam Inundation Map
 Key Areas Around Lake Mead

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TEMPLE BAR AREA

Colorado River Storage Project
 Glen Canyon Dam Inundation Map
 Key Areas Around Lake Mead

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0 1000 2000



Scale of Feet
 Scale = 1:24,000



Flood Boundary:

Flooding of Lake Mead shoreline
 resulting from failure of
 Glen Canyon Dam.

Maximum water surface elevation
 is 1304 feet (397 meters).

FLOOD VALUES:

For dam failure study, Lake Mead water surface elevation was assumed to be 1214.5 feet (for a December failure) or 1219.8 feet (for a July failure).

Failure of Glen Canyon Dam would result in the Lake Mead water level rising by approximately 85 to 90 feet.
 Arrival time of leading edge: 15 to 18 hours after Glen Canyon Dam failure.
 Time to maximum water surface (elevation 1304 feet): 73 to 76 hours after Glen Canyon Dam failure.

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