

NNNN#

Regarding the
real volcano

X
WASH 113 OREG

257 05/14/1 2204Z

DE WASH 113 1341600
R 141700Z MAY 81
FM DES WASH
TO FEMA REG TEN
REG TEN STATE CD DIRECTORS
NATIONAL GUARD BUREAU
SALEM, OR

MAY 15 1981

Governor Atiyeh

BT

UNCLAS

0730 PDT MAY 14, 1981 MT ST HELENS PLUME TRAJECTORY FORECAST
WIND TRAJECTORIES GO TO THE NORTH THROUGH EAST. TRAJECTORIES
ARE EAST OF A LINE FROM THE MOUNTAIN TO ALONG THE CASCADE
MOUNTAINS AND NORTH OF A LINE FROM THE MOUNTAIN TO PENDELTON.
WINDS ALOFT NEAR MT ST HELENS AT 7 AM PDT

ELEVATION FEET	WPND FROM DEG	SPEED KT	PLUME GOES TO
6000	240	10	NORTHEAST
12000	270	15	EAST
18000	230	20	EAST NORTHEAST
24000	210	35	NORTH NORTHEAST
30000	200	60	NORTH NORTHEAST
40000	230	30	EAST NORTHEAST
50000	260	15	EAST

US GEOLOGICAL SURVEY AND UNIVERSITY OF WASHINGTON
VOLCANIC AND SEISMIC ACTIVITY AT MT ST HELENS
REPORT AT 0800 MAY 14, 1981
WEATHER ALLOWED FIELD WORK AT MT ST HELENS UNTIL LATE AFTERNOON
ON WEDNESDAY, MAY 14, 1981.

FIELD CREWS CONTINUED GEOLOGIC, HYDROLOGIC AND DEFORMATION STUDIES.
MAINTENANCE AND INSTALLATION OF SEISMIC AND COMMUNICATIONS
SYSTEMS WERE PERFORMED. SEISMIC ACTIVITY AT MT ST HELENS HAS
REMAINED AT A RELATIVELY LOW LEVEL, WITH OCCASIONAL SEISMIC BURSTS
DURING THE PAST 24HOURS. A SLIGHT INCREASE IN SEISMIC ACTIVITY
LOCAL TO THE MOUNTAIN WAS RECORDED FOR TWELVE HOURS STARTING AT
APPROXIMATELY 0500 AM PDT.

OBSERVED ACTIVITY DURING DAYLIGHT HOURS INCLUDED SOME INCREASE IN
PLUME HEIGHT STARTING APPROXIMATELY 0500 AM PDT. ANOTHER INCREASE
IN PLUME HEIGHT WAS REPORTED AT APPROXIMATELY 1430 PDT.
THE INCREASED EMISSIONS, PRIMARILY GAS AND STEAM CONDENSATE,
CONTAINED SOME MINOR AMOUNTS OF FINE ASH. THE PLUME WAS SUSTAINED
CONTINUALLY THROUGHOUT THE DAY, AT TIMES REACHING ALTITUDES OF
11,000 TO 12,000 FEET.

HYDROLOGIC CONDITIONS

STREAMFLOW OF THE TOUTLE RIVER IS RECEDING AS IS NORMAL FOR THE MID-
SPRING SEASON; HOWEVER, FLOW IS SOMEWHAT LOWER THAN NORMAL FOR MAY.
GEOLOGICAL SURVEY HYDROGRAPHERS MEASURED A STREAMFLOW OF 1450 CFS
ON MAY 12 AT THE MOUTH OF THE TOUTLE RIVER. THE 53-YEAR AVERAGE FLOW
FOR MAY IS 2200 CFS.

SIGNED/HUGH H. FOWLER, DIRECTOR

BT