

5.5 MINERAL AND SOIL RESOURCES

This section is based, in part, on the 2007 City of Fortuna Background Report, Section 6.5, Mineral/Soils and Energy Resources. The Background Report is included in its entirety (Attachment H); published under separate cover.

Environmental Setting

There are 93 sand, gravel, metal, stone and clay extraction sites in Humboldt County. The most important resource in terms of abundance, demand, and economic value is aggregate (e.g., gravel and sand, including shale and stone). According to the County of Humboldt Extraction Review Team (CHERT), in-stream aggregate extraction included 680,426 cubic yards in 2000. This comprised 71% of the 962,826 cubic yards approved for extraction. Aggregate resources are concentrated along the Eel and Van Duzen Rivers, accounting for three-quarters of the extracted aggregate in Humboldt County. Aggregate is used locally; it is not exported from the County.

The reach of the Eel River along the Planning Area's western boundary has four gravel extraction sites. Two are partially or wholly within the Planning Area (See Figure 5-5). Each extraction site is mapped by Humboldt County in its Natural Resources and Hazards Report (Figure 7-1), and represents a locally-important mineral resource recovery/extraction site (Humboldt County 2002).

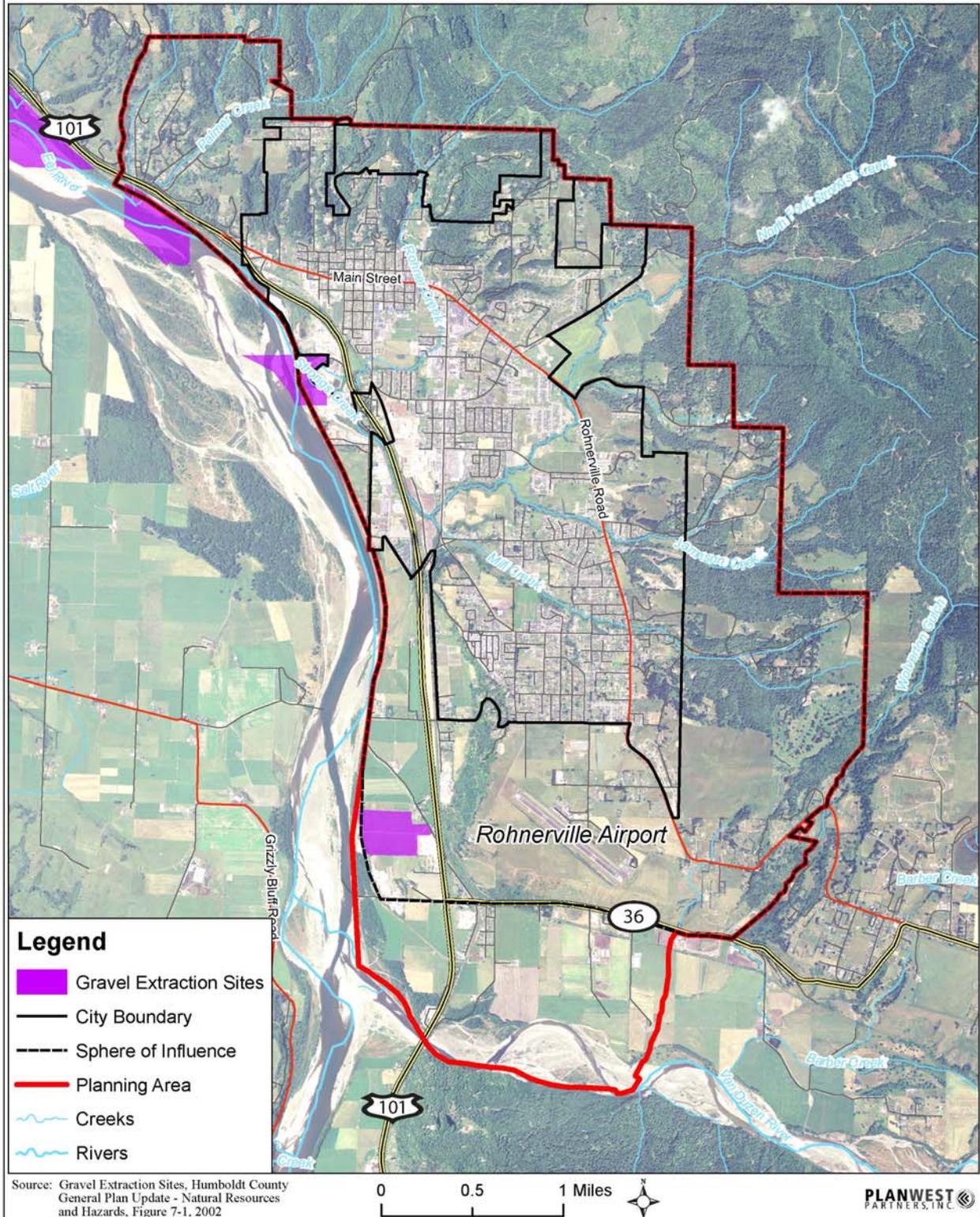
The most visible site is located on Worswick Bar, more popularly known as Fernbridge bar. This river bar is owned by Humboldt County. The extraction operation is run by the County. The County has a vested right to extract up to 200,000 cubic yards of gravel per year, however, the related Coastal Development Permit issued by the California Coastal Commission in 2009 limits the operation to 25,000 cubic yards of gravel per year for five years (California Coastal Commission, 2009). Extraction occurs on the bar throughout the year, except during the wet season and Snowy Plover Nesting season. Reclamation activities also occur at the bar during certain periods of the year including the removal of temporary structures and holes in the gravel bars that could trap fish, and restoring riparian habitat.

Applicable Plans, Policies, Codes and Regulations

Federal

Clean Water Act Section 404. The Clean Water Act Section 404 governs streambed dredging and is regulated by the Army Corp of Engineers. Before streambed dredging can occur, a general permit must be issued from the Army Corp of Engineers.

Fortuna General Plan 2030
Figure 5-5, Gravel Extraction Sites



State

Surface Mining and Reclamation Act of 1975 (SMARA). The Surface Mining and Reclamation Act of 1975 (SMARA) was enacted by the State of California in response to the continuing need for a supply of mined resources to ensure that significant adverse impacts of surface mining will be mitigated. The Act's requirements apply to any entity, including government agencies, engaged in surface mining operations in California (including those on federally managed lands) that disturb more than one acre or that remove more than 1,000 cubic yards of material. This includes, but is not limited to: prospecting and exploratory activities, dredging and quarrying, streambed skimming, borrow pitting, and the stockpiling of minerals.

SMARA is implemented via city and county "lead agencies" that adopt ordinances, in accordance with state policy, for land use permitting and reclamation procedures that provide the regulatory framework under which local mining and reclamation activities are conducted. The SMGB reviews the lead agency's ordinances to determine whether the ordinances meet the procedures set forth under SMARA. Local governments are required to address mineral recovery activities through direct regulation of mining operations and through planning policies that synchronize the mineral resource needs of the state and regions with the maintenance of local environmental quality.

SMARA also establishes a two-step mineral lands inventory process called "classification-designation," to ensure that important mineral deposits are identified and protected for continued and future extraction. During the classification phase, the State Geologist prepares a geological inventory of important selected mineral commodities within the defined study region. Classification includes identifying the market area of the commodity, projecting the future needs for the commodity within the study region, and geologically classifying the lands within the study area as to the presence or absence of mineral resources. The classification is based solely on geological factors and does not consider existing land uses. When the classification is completed and approved, the state board sends copies of the State Geologist's report and maps classifying the mineral lands to the affected cities and counties. Within twelve months of receiving the report, the city or county must as part of its General Plan, adopt mineral resources management policies that recognize the mineral classification information, assist in the management of land uses that affect areas of regional significance, and adopt policies that emphasize the conservation and extraction of identified mineral deposits.

Public Resources Code Sections 2770 and 2774. PCR §2770 governs mining operations in California by requiring a permit, a reclamation plan, and approved financial assurances for surface mining operations. PCR §2774 entails the adoption of ordinances that establish procedures for review and approval of reclamation plans and financial assurances and the issuance of a permit to conduct surface mining operations. A mining operation might also need to obtain permits, agreement or authorization from one or more of the government agencies listed below:

State Agencies

- Department of Conservation
- Department of Forestry and Fire Protection
- Department of Water Resources & State Water Resources Control Board
- Regional Water Quality Control Boards
- State Lands Commission

Federal Agencies

- National Oceanic & Atmospheric Administration Fisheries
- U.S. Fish and Wildlife Service
- U.S. Forest Service

Fish and Game Code §1602. Fish and Game Code §1602 requires that any person, agency, utility, or local government affiliate, notify the California Department of Fish and Game (CDFG) before beginning any activity that substantially obstructs or diverts the natural flow of rivers, streams, or lakes; or substantially change or use any material from the bed, channel, or bank of a river, stream, or lake. Most gravel mining operations require a “Streambed Altercation Agreement.”

Methodology

Policy Background

The following policy background is used to assess the mineral and soil resource impacts of the proposed plan:

- Aggregate will continue to be extracted from the four existing aggregate extraction sites located within and/or adjacent to the Planning Area (Figure 5-5).
- The State will continue to regulate aggregate extraction.

Thresholds of Significance

Proposed General Plan implementing could have a significant impact on mineral resources if it:

- Results in the loss of availability of a known mineral resource that is of value to the region and the residents of the state; or
- Results in the loss of availability of a locally important mineral resource recovery/ extraction site delineated in a local General Plan, Specific Plan, or other Land Use Plan.

Implications of the Draft Land Use Diagram

The proposed General Plan does not include proposals for new mineral resource extraction sites. The proposed plan does not propose to close existing mineral resource extraction sites. However, there are two existing mineral extraction sites in the unincorporated portion of the Planning Area, including one west of HWY 101, north of the proposed Riverwalk District, and one west of HWY 101 in the area of Hansen Lane (see 5-7). These areas are designated as Industrial and Agriculture respectively under the proposed Land Use Diagram and neither of these designations specifically permits mineral resource extraction. Therefore, these mineral resource extraction sites in the Planning Area will become “non-conforming uses” under the proposed plan.

Proposed General Plan implementation has the potential to impact mineral resource extraction sites indirectly by designating areas for urban development adjacent to the existing resource extractions sites. This could result in potential land use conflicts leading to the resource extraction operations being classified as a “nuisance” uses and requiring them to change or cease operations.

General Plan Policy Response

The proposed General Plan includes the following policies and programs relevant to mineral resources.

Policy NCR-4.1 Minimize Land Conflicts. The City shall require that new extractive operations are designed to provide a buffer between existing or likely adjacent uses, to minimize incompatibility with nearby sites and adequately mitigate their environmental and aesthetic impacts.

Policy NCR-4.2 Future Development Planning. The City shall plan future development such that it will not interfere with the utilization of identified mineral deposits.

Policy NCR-4.3 Extraction Management. The City shall mitigate environmental impacts from mineral resource extraction and transport, with applicable conditions for:

- Nuisance abatement for dust, odor, debris, and noise;
- Restoration of natural features, such as ground cover, topography, drainage, habitat, groundwater, and related issues; and
- Control of traffic volumes and damage to road surfaces.

Policy NCR-4.4 Reclamation Conditions. The City shall apply appropriate conditions for reclamation of mineral resource extraction sites for safe, attractive, and beneficial future use.

Policy NCR-4.5 County, State, and Federal Regulation Compliance. The City shall identify and apply applicable County, State, and Federal regulations when permitting resource extraction.

Policy NCR-4.6 SMARA Compliance. The City shall require environmentally sound mining operations through compliance with the California Surface Mining and Reclamation Act (SMARA) and other applicable standards and regulations.

Policy NCR-4.7 Mineral Deposits Mapping. The City shall work with Humboldt County and the State to develop, maintain, and periodically update maps identifying areas with known potentially valuable mineral resources and areas where permission exists for mineral development, within the Planning Area.

Policy NCR-4.8 Non-Mineral Development. The City shall oppose non-mineral development which would be adversely impacted by mineral working.

Impacts and Mitigation

Impact 5.5-1: Loss of Availability of a Known Mineral Resource

Proposed General Plan implementation could result in the loss of availability of a known mineral resource valuable to the region or state.

Discussion

Four aggregate extraction sites occur along the Planning Area's westerly boundary, two of which exist partially or wholly within the Planning Area (Figure 5-5). The proposed Land Use Diagram designates the northernmost as Industrial and the other as Agriculture. Neither of these designations specifically permits aggregate extraction operations, so the potential that such extraction operations would not be permitted under the proposed plan exists. The proposed plan includes the following policies and programs that hint at permitting aggregate extraction operations:

- Policy NCR-4.1 requires new extraction operations to provide buffers with adjacent uses to minimize land use incompatibilities;
- Policy NCR-4.2 requires the City to plan future development so as to not interfere with the utilization of mineral deposits; and
- Policy NCR-4.5 requires the City to identify and apply County, State and Federal regulations when permitting resource extraction. However, without a policy that specifically permits the continued operation of existing mineral resource recovery/extraction operations, the plan could result in the loss of availability of known mineral resource sites.

Aggregate resources in Humboldt County are concentrated along the Eel and Van Duzen Rivers and are the source for three-quarters of the extracted aggregate in the county. Channels and floodplains of the lower reaches of these rivers represent aggregate resource areas, and within the Planning Area, this includes the area west of HWY 101 and the north bank and floodplain of the Van Duzen River. The proposed Land Use Diagram designates: the area west of HWY 101, north of the HWY 101/Kenmar Road interchange, as Industrial, Riverwalk District, Public, and

Commercial; the area west of HWY 101, south of the HWY 101/Kenmar Road interchange, as Agriculture; and the north bank and floodplain of the Van Duzen River as Agriculture. None of these designations specifically permits aggregate extraction operations, so the potential that new aggregate extraction operations would not be permitted in these areas under the proposed plan exists. However, several policies in the proposed plan hint at permitting new extraction operations. In addition, even if new aggregate extraction operations are not permitted, the proposed plan will not result in the loss of availability of a known mineral resource valuable to the region or state. First, in-stream aggregate extraction in the county included 680,426 cubic yards in 2000, only 71% of the 962,826 cubic yards approved for extraction demonstrating a lack of demand. Secondly, even with increased demand, substantial untapped aggregate deposits exist along the Eel River downstream of the Planning Area. The proposed plan will not impact access to these deposits. Therefore, the impact will be less than significant.

Under the proposed Land Use Diagram, new urban uses will be permitted adjacent to the existing aggregate extraction sites along the Planning Areas western boundary. New development of urban uses adjacent to these existing extraction sites, especially residential uses, could result in land use conflicts leading to the extractions operations being classified as a “nuisance” and eventually being pressured to cease operations. The proposed plan includes Policy NCR-4.7 that requires the City to oppose non-mineral development that could be adversely impacted by extraction operations. Still, existing aggregate extraction operations could be classified as a “nuisance” in the future, resulting in closure of extraction operations and the loss of availability of a known mineral resource. Any such occurrence will represent a significant impact.

Determination of Level of Significance

This impact is Potentially Significant but can be reduced to Less-Than-Significant with incorporation of mitigation.

Mitigation

Mitigation Measure 5.5-1a: Add a new policy as follows:

NCR-4.9 Continuation of Existing Mineral Resource Recovery/Extraction. The City shall permit existing mineral resource recovery/extraction operations in the Planning Area to continue. Petitions to classify extraction operations as “nuisances” will not be entertained provided that extraction activities are occurring consistent with applicable federal, state and local regulations. Existing mineral recovery/extraction operations shall be permitted to continue as nonconforming uses, subject to the “Nonconforming uses” section of the City’s Municipal Code, Section 17.54.185.

Impact 5.5-2: Loss of a Delineated Mineral Resource Recovery/Extraction Site

Proposed General Plan implementation could result in the loss of availability of a locally-important mineral resource recovery/extraction site Delineated in a Local General Plan, Specific Plan, or other Land Use Plan.

Discussion

The General Plans of two local jurisdictions apply within the Planning Area. The Fortuna General Plan applies within the incorporated portions of the Planning Area, and the Humboldt County General Plan applies within the unincorporated portions. The four existing aggregate extraction sites located within/adjacent to the Planning Area are delineated in the Humboldt County General Plan, Natural Resources and Hazards Report (Figure 7-1; Humboldt County 2002). Without implementation of proposed mitigation policy NCR-4.9 Continuation of Existing Mineral Resource Recovery/Extraction, the proposed plan could result in the loss of these delineated mineral resource recovery/extraction sites. Any such loss would represent a significant impact.

Determination of Level of Significance

This impact is Potentially Significant but can be reduced to Less-Than-Significant with incorporation of mitigation.

Mitigation

Implement Mitigation Measure 5.5-1a.

References Cited

Humboldt County, 2002. Humboldt County General Plan Update 2025 - Natural Resources and Hazards Report. Prepared by Dyett & Bhatia for Humboldt County. September.

California Coastal Commission, 2009. Application Number 1-09-014.