

ACTION: Notice of decisions.

SUMMARY: On September 2, 1994, the Secretary of Commerce (Secretary) issued decisions in two consistency appeals of Mobile Exploration & Producing Southeast, Inc. (Mobil). Mobil is the operator of Outer Continental Lease OCS A-0236, an oil and gas lease in federal waters approximately 39 miles off North Carolina's (State) coast, known as Manteo Area Block 467 (Block 467). In one decision, the Secretary declined to override the State's objection to Mobil's proposed drilling discharges. In a second decision, the Secretary declined to override the State's objection to Mobil's overall Plan of Exploration (POE).

Mobil submitted its proposed POE for Block 467 to the Minerals Management Service of the Department of the Interior on August 20, 1990. Mobil proposed drilling one exploratory well to assess hydrocarbon reserves in an area near "the Point," a biologically unique area defined by the convergence of the Gulf Stream, slope, and shelf waters, and containing significant natural resources. The Point is a prime fishing area for North Carolina fishermen.

Mobil also applied for a National Pollutant Discharge Elimination System (NPDES) permit required by section 402(a) of the Federal Water Pollution Control Act, as amended (Clean Water Act), for its drilling discharge activity. In conjunction with the exploratory drilling, Mobil proposed the discharge of drilling wastes in accordance with its NPDES permit application.

Mobil has certified that the POE and drilling discharge activities are consistent with the State's Coastal Management Program (CMP). The State objected to Mobil's POE and drilling discharges based upon a lack of necessary information to assess the consistency of Mobil's activities. Under sections 307(c)(3) (A) and (B) of the Coastal Zone Management Act, as amended (CZMA), and 15 CFR 930.121 and 930.122, the State's objections preclude any Federal agency from issuing any permit or license for Mobil's proposed activities, unless the Secretary finds that the activities are either consistent with the objectives or purposes of the CZMA (Ground I) or necessary in the interest of national security (Ground II). If the requirements of either Ground I or Ground II are met, the Secretary must override the State's objections. In accordance with sections 307(c)(3) (A) and (B) of the CZMA, Mobil filed with the Secretary two separate appeals: (1) from the State's objections to Mobil's proposed POE and

(2) from the State's objections to Mobil's proposed drilling discharges. Mobil argued both Grounds I and II for a Secretarial override in each appeal.

Several threshold issues were raised by Mobil and the State during the course of both appeals. The decisions determined, in part, that the State's objections were properly lodged, and that the Secretary will necessarily determine the adequacy of information for an override rather than summarily dismiss these appeals.

Upon consideration of the information submitted by Mobil, the State and interested Federal agencies, the Secretary made the findings discussed below.

The decisions find that Mobil's proposed activities satisfy the first element of Ground I because its POE furthers, and its NPDES permit discharges indirectly further, one of the objectives or purposes of the CZMA. The CZMA recognizes a national objective in achieving a greater degree of energy self-sufficiency.

Regarding the second element of Ground I, however, the decisions find that the proposed exploration and drilling discharge activities will adversely affect the State's coastal resources and uses. Moreover, the information in the record of each appeal is insufficient to adequately identify the extent of the individual and cumulative adverse effects. Consequently, the decisions conclude that the information in the record of each appeal is inadequate to determine that the national interest benefits of Mobil's proposed POE and drilling discharges outweigh the proposed activities' adverse effects on the State's coastal resources and uses. Therefore, Mobil's proposed activities do not satisfy the second element of Ground I.

The decisions find that Mobil's proposed activities satisfy the third element of Ground I because the proposed exploration and drilling discharge activities will not violate the Clean Air Act or the Clean Water Act. The decisions also find that Mobil's proposed activities satisfy the fourth element of Ground I because there is no reasonable alternative available to Mobil that would allow the proposed exploration and drilling discharge activities to be carried out in a manner consistent with the State's CMP.

Finally, the decisions find that neither Mobil nor any Federal agency commenting on Ground II specifically identified or explained how Mobil's inability to proceed with its proposed activities would significantly impair a national defense or other national security interest.

Because Mobil's proposed POE and drilling discharge activities fail to satisfy all four of the requirements of Ground I and do not meet the requirements of Ground II, the Secretary did not override the State's objections to Mobil's proposed exploration and drilling discharges. Consequently, the proposed exploration and drilling discharge activities may not be permitted by Federal agencies. Copies of the two decisions may be obtained from the office listed below.

FOR ADDITIONAL INFORMATION CONTACT: Roger B. Eckert, Attorney-Adviser, Office of the Assistant General Counsel for Ocean Services, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, 1305 East-West Highway, room 6111, Silver Spring, Maryland 20910; 301-713-2967

(Federal Domestic Assistance Catalog No. 11.419 Coastal Zone Management Program Assistance)

Dated: September 16, 1994.

James W. Brennan,
Acting General Counsel.

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[Docket No. 940947-4247; I.D. 072994C]

Endangered and Threatened Species; Mid-Columbia River Summer Chinook Salmon

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of determination.

SUMMARY: NMFS has determined that the mid-Columbia River summer chinook salmon, as petitioned, do not constitute a "species" under the Endangered Species Act of 1973, as amended, (ESA) and therefore does not qualify for listing under the ESA at this time. However, the mid-Columbia River summer chinook are part of a larger evolutionarily significant unit (ESU) that includes all late-run (summer and fall) Columbia River chinook salmon from the mainstem Columbia River and tributaries between Chief Joseph and McNary dams, termed mid-Columbia River Summer/fall chinook salmon. NMFS has determined that at the present time this ESU does not warrant listing as a threatened or endangered species.

ADDRESSES: Environmental and Technical Services Division, NMFS, Northwest Region, 911 NE, 11th Avenue, Suite 620, Portland, OR 97232.

FOR FURTHER INFORMATION CONTACT:

Garth Griffin, Environmental and Technical Services Division, (503/230-5430) or Marta Nammack, Protected Species Management Division, (301/713-2322).

SUPPLEMENTARY INFORMATION:**Petition Background**

On June 3, 1993, the Secretary of Commerce received a petition from American Rivers, Northwest Environmental Defense Center, Sierra Club Northwest Resource Information Center, Friends of the Earth, Inland Empire Public Lands Council, Washington Wilderness Coalition, North Central Washington Chapter Audubon Society, Trout Unlimited, Washington Trout, and the Federation of Flyfishers to list mid-Columbia River summer chinook salmon (*Oncorhynchus tshawytscha*) and to designate critical habitat under the ESA (15 U.S.C. 1531 *et seq.*). NMFS published a document on September 3, 1993 (58 FR 46944), that the petition presented substantial scientific information indicating that the listing may be warranted. NMFS also announced its intention at that time to conduct a status review of mid-Columbia River summer chinook salmon and requested comments from any party having relevant information concerning: (1) Whether this stock qualifies as a "species" under the ESA, and (2) whether the stock is endangered or threatened based on the listing criteria. Specifically, NMFS solicited information on the reproductive isolation and evolutionary significance of the mid-Columbia River summer chinook salmon compared to mid-Columbia River fall chinook salmon and the present and historic status of the mid-Columbia River summer and fall chinook salmon. NMFS also requested information on areas that may qualify as critical habitat for the mid-Columbia River summer chinook salmon.

Biological Background

NMFS' Northwest Fisheries Science Center Biological Review Team (BRT) has reviewed the status of mid-Columbia River summer chinook (Northwest fisheries Science Center BRT 1994), the results of which are summarized below. A more complete discussion of the subject, including additional references, will be available upon request in the near future (see ADDRESSES).

The "mid-Columbia" region of the Columbia River Basin, as defined here, encompasses the mainstem Columbia River, includes five principal subbasins, (the Okanogan, Methow, Entiat,

Wenatchee, and Yakima), and is located between Chief Joseph Dam, River Mile (RM) 545, and McNary Dam, RM 292 (see Figure 1). The petition, however, limited the "mid-Columbia" region to the Columbia River and its tributaries between Chief Joseph Dam and Priest Rapids Dam, RM 397, which excluded the Yakima Subbasin and the Hanford Reach, a section of the mainstem Columbia River downstream of Priest Rapids Dam. NMFS selected the larger boundary for the status review because it included not only the petitioned chinook salmon but also other Columbia River Basin summer- and fall-run chinook salmon above McNary Dam (excluding Snake River chinook salmon) which have a close affinity with the petitioned salmon, as indicated by genetic and life history information.

In delineating the boundaries for a status review, NMFS policy is to determine if the petitioned stock represents an ESU. If NMFS determines that the petition does not address an ESU, as was the case here, NMFS examines larger units with an affinity to the petitioned stock to determine the ESU which encompasses the petitioned stock. The geographical area of this larger ESU will then serve as the boundaries for determining species status.

Chinook salmon found in the mid-Columbia region have historically been divided into three runs, spring, summer, and fall, according to adult passage timing at the mainstem Columbia River hydropower projects and spawning location and timing. All adult mid-Columbia River chinook salmon must pass the four lower Columbia River hydropower projects, including Bonneville, The Dalles, John Day, and McNary dams. Those mid-Columbia River chinook salmon destined for the northernmost spawning locations must then pass five mid-Columbia River hydropower projects, including Priest Rapids, Wanapum, Rock Island, Rocky Reach, and Wells dams.

The bulk of the adult mid-Columbia River spring-run chinook salmon typically pass Priest Rapids Dam between the end of April and the end of May. Spring-run spawning occurs in August and September in the tributaries and upper reaches of four major mid-Columbia River tributaries (the Yakima, Wenatchee, Entiat, and Methow rivers). Spring-run juveniles primarily migrate to the ocean as yearling smolts after spending a full year in freshwater and are commonly referred to as "stream-type" chinook salmon (Healey 1991).

The bulk of the mid-Columbia River summer-run chinook salmon typically pass Priest Rapids Dam between the end

of June and the middle of August, overlapping with the beginning of the fall-run chinook salmon, the bulk of which typically pass Priest Rapids Dam from the middle of August through October. In addition, the summer- and fall-run spawn timing and location also overlap and appear to form a continuum rather than two discrete patterns. Summer and fall chinook spawning occurs from the end of September through November and extends from the lower reaches of the major tributaries, including the Wenatchee, Methow, and Okanogan (including the Similkameen) rivers, into the mainstem mid-Columbia River. Summer- and fall-run juveniles primarily migrate as sub-yearling smolts to the ocean, after spending less than a year in freshwater, and are considered "ocean-type" chinook salmon (Healey 1991).

Consideration as a "Species" Under the ESA

To qualify for listing as a threatened or endangered species, mid-Columbia River summer chinook salmon must be a "species" under the ESA. The ESA defines a "species" to include any "distinct population segment of any species of vertebrate. . . which interbreeds when mature." NMFS published a policy (56 FR 59512, November 20, 1991) describing how the agency will apply the ESA definition of "species" to Pacific salmonid species. This policy provides that a salmonid population will be considered distinct, and hence a species under the ESA, if it represents an evolutionary significant unit (ESU) of the biological species. The population must satisfy two criteria to be considered an ESU: (1) It must be reproductively isolated from other conspecific population units, and (2) it must represent an important component in the evolutionary legacy of the biological species. The first criterion, reproductive isolation, need not be absolute, but must be strong enough to permit evolutionary important differences to accrue in different population units. The second criterion is met if the population contributes substantially to the ecological/genetic diversity of the species as a whole. Further guidance on the application of this policy is contained in "Pacific salmon (*Oncorhynchus* spp.) and the Definition of Species under the ESA," which is available upon request (see ADDRESSES).

Reproductive Isolation

For this criterion, NMFS considered available information regarding geographic and life-history factors that may isolate mid-Columbia River

summer chinook salmon as well as genetic factors that indicate reproductive isolation. Both NMFS and the petitioners considered reproductive isolation with respect to three other groups of chinook salmon within the Columbia River Basin, including: Snake River summer chinook salmon, mid-Columbia River fall chinook salmon, and mid-Columbia River spring chinook salmon.

Reproductive isolation between summer chinook salmon from the Columbia and Snake rivers is complete or nearly so. Apart from the substantial geographic distance separating the two groups, large differences in life-history patterns and in genetic characteristics revealed by protein electrophoresis indicate strong isolation over a substantial period of time.

Although there is a lack of genetic information specifically for fall-run fish from the rivers identified in the petition (Methow, Okanogan, and Wenatchee), the close genetic similarity between mid-Columbia River summer chinook salmon and fall chinook salmon from the Hanford Reach area was documented in NMFS' status reviews for the Snake River spring/summer chinook salmon and Snake River fall chinook salmon (Matthews and Waples 1991; Waples et al. 1991). This relationship was confirmed in recent analyses by Washington Department of Fisheries (WDF) which found close genetic similarities between two fall-run populations, (the Hanford Reach natural population and Priest Rapids hatchery population), and summer-run adults sampled at Wells Hatchery, Wells Dam passage ladder, and in the Similkameen River (a tributary of the Okanogan River) (Marshall 1993). Hence, similar genetic characteristics, in addition to similar life history information including adult and juvenile migration timing, and spawning timing and location, indicate that the petitioned fish, mid-Columbia summer chinook, are not reproductively isolated, but instead, are closely aligned with mid-Columbia fall chinook.

There is strong evidence for reproductive isolation between spring-run chinook salmon in the mid-Columbia River and the closely aligned summer- and fall-run chinook salmon. Washington Department of Fisheries (WDF) has compiled a considerable amount of genetic data for more recent samples in the area which showed a fairly large difference between the summer/fall-run and spring-run genetic characteristics (Marshall 1993). This genetic evidence is consistent with life-history differences between the two groups in the mid-Columbia River, including adult and juvenile migration

timing, and spawning timing and location.

Ecological/Genetic Diversity

For this criterion, NMFS used historic accounts to determine how the indigenous mid- and upper Columbia River chinook salmon populations have been altered and to determine the relationship of these historic populations to the present mid-Columbia River chinook salmon.

The construction of Grand Coulee Dam in 1941 blocked the access of upper Columbia River chinook salmon to their spawning habitat in the Lake Windermere region of Canada. It seems likely that, given their extensive upriver migration and, presumably, distinctive habitat characteristics, these upper Columbia River chinook salmon may have historically comprised an ESU. The salmon which used the upper Columbia River were "relocated" during the Grand Coulee Fish Maintenance Project (GCFMP) into the Entiat, Methow, and Wenatchee rivers after being trapped at Rock Island Dam. Given this relocation program, the petitioners speculate that the present summer-run chinook salmon found in the Methow and Wenatchee rivers are the last remnants of the upper Columbia River summer-run chinook salmon. While it is possible that some genes from upriver stocks were incorporated into the mid-Columbia River summer chinook salmon, NMFS found no empirical evidence that any appreciable remnants of this gene pool, or distinctive upriver stock characteristics, presently remain in the petitioned summer-run chinook salmon found in the Methow and Wenatchee rivers. Review of historic accounts of the spawn timing of upriver populations, plus comparisons with Fraser River upriver populations in geographic proximity, indicate that upper Columbia River chinook salmon may have actually been stream-type chinook salmon rather than ocean-type chinook salmon. Thus, it is uncertain what the relationship is between the ocean-type fish currently residing in the mid-Columbia River and the original upriver populations. Furthermore, if an upper Columbia River summer-run of chinook salmon with distinctively large individuals (termed "June hogs" by the petitioners) existed sometime prior to 1940, it had expired prior to the initiation of the GCFMP because late-run ocean-type fish taken at Rock Island averaged only about 8 kg (Fulton and Pearson 1981).

The Okanogan River was the only major tributary in the petitioned area that did not receive transplants from the GCFMP. However, it is unlikely that

late-run fish in this river represent an essentially pure native stock. All late-run chinook salmon adults reaching Rock Island Dam were taken for the GCFMP for a period of 5 years. According to age data for late-run chinook salmon from the mid-Columbia River, less than 1 percent of returning adults are older than 5 years. Therefore, the current population in the Okanogan River, which is upstream from Rock Island Dam, must be derived largely, if not entirely, from recolonization. Furthermore, several genetic studies (Hershberger et al. 1988; Marshall 1993; unpublished NMFS data) have shown a strong genetic similarity between summer-run fish from the Wenatchee and Okanogan rivers and Wells Hatchery.

Genetic and life-history information all fail to demonstrate that mid-Columbia summer chinook are reproductively isolated. Therefore, they do not comprise an ESU. Rather, this information indicates a close affinity between summer- and fall-run chinook salmon in the mid-Columbia River. In addition, coded wire tag data suggest that the two forms have a similar ocean distribution (Howell et al. 1985). Therefore, NMFS concluded that all late-run chinook salmon from the mid-Columbia River (as defined here) are part of the same ESU. NMFS evaluated the relationship of this ESU to three other groups of Columbia River Basin chinook salmon. Spring chinook salmon from the mid-Columbia River are part of a separate ESU because of substantial life-history and genetic differences. Snake River summer chinook salmon are much more closely related to Snake River spring chinook salmon than they are to Columbia River summer chinook salmon. Ecological, genetic, and ocean distribution data were previously used to demonstrate that Snake River fall chinook salmon are distinct from mid-Columbia River fall chinook salmon and represent a separate ESU (Waples et al. 1991).

Therefore, NMFS concludes that the best available information indicates that the late-run chinook salmon from the mid-Columbia River, termed mid-Columbia River summer/fall chinook salmon, meet both of the criteria necessary to be considered an ESU, are separate from all other chinook salmon in the Columbia River Basin, and are considered a "species" under the ESA.

Status of the Mid-Columbia River Summer/Fall Chinook Salmon ESU

In considering whether the ESU is threatened or endangered according to the ESA, NMFS evaluated both qualitative and quantitative information.

Qualitative evaluations considered recent, published assessments by agencies or conservation groups of the status of chinook salmon within the geographic area. Quantitative assessments were based on time series of both salmon redd counts in the tributaries and adult counts at Columbia River dams.

Nehlsen et al. (1991) considered summer chinook salmon to be of "special concern" in the Okanogan River and at "moderate risk of extinction" in the Methow River. They also considered summer chinook salmon in the Entiat River to be extinct but considered fall chinook salmon populations in this area to not be at risk. WDF et al. (1993) considered summer chinook salmon in the Okanogan and Methow rivers to be "depressed," but rated all other existing summer and fall chinook salmon stocks in this region to be "healthy."

Redd counts (both summer- and fall-run fish) for the Wenatchee, Methow, Okanogan, and Similkameen rivers all show large fluctuations, with very low points in the early 1980s. Since that time, the Wenatchee River redd counts show a substantial increase, while redd counts for the other three rivers show no discernible trend. Over the entire available data series (1956-93), only the Methow River redd counts show a downward trend, although both the Methow and Okanogan River counts are substantially below peak counts from the late 1960s and early 1970s. Both the Similkameen and Wenatchee River counts show substantial upward trends over the full data series.

Counts of adult salmon ascending fish ladders at dams provide additional assessment of population abundance and trends. However, basing conclusions on dam counts is inadvisable due to the inconsistency between an actual continuum of passage, which can vary with environmental conditions, and the inflexible count cutoff dates between spring-, summer-, and fall-run chinook salmon.

The longest time series (1993-93) count record for the mid-Columbia River is from Rock Island Dam on the mainstem Columbia River below the Wenatchee River. Because of this location, Rock Island Dam counts provide an index primarily of the petitioned stocks and not the entire ESU. Counts of adult late-run chinook salmon at Rock Island Dam decline in the late 1930s, followed by a substantial increase during the 1940s and 1950s. Since the late 1950s, abundance has fluctuated over about a threefold range with no substantial trend. Counts of late-run adult chinook salmon in 1991

and 1992 at mid-Columbia River dams were well below the 10-year average, and at some dams, the 1992 counts were record lows. In 1993, counts at all dams were well above the 1992 low point, and most were near or above the 10-year average. While the low counts in 1991 and 1992 are of concern, they are not unprecedented. Similar low counts occurred in 1932 and 1933, after which counts increased, reaching record highs at Priest Rapids and Rock Island dams in the late 1980s.

Total abundance of the ESU is relatively large, with a recent (1989-93) 5-year average estimate of 22,000 adults passing Priest Rapids Dam and an additional 42,000 adults spawning in Hanford Reach of the Columbia River and the Yakima River, or a total of approximately 64,000 adults for the entire ESU. (Note that Hanford Reach and Yakima River spawning estimates are calculated by subtracting counts from Priest Rapids Dam, Ice Harbor Dam, and various hatcheries from McNary Dam counts; therefore, these estimates may be subject to error.)

NMFS has not attempted to estimate extinction probabilities for late-run mid-Columbia chinook salmon. However, two reports submitted to the administrative record (ADFG 1993; Chapman et al. 1994) provided such estimates. Both applied the Dennis et al. (1991) model to an aggregate stock of late-run mid-Columbia River chinook salmon. Collectively, the results suggest that the near-term risk of extinction of the ESU is probably low. Results from both applications of the Dennis model should be viewed with caution because they are based on a simple model, depend upon simplistic assumptions regarding salmon population age structure, may not include all sources of variation in stock abundance, ignore subpopulation structure, and have wide confidence intervals.

In conclusion, while dam and redd count information indicate that some of the individual runs, which originate in a limited portion of the ESU's geographic range, are of concern, the mid-Columbia River late-run chinook salmon ESU as a whole appears to be relatively healthy, with little risk of extinction in the foreseeable future. Even if NMFS considered a unit that included only those rivers identified in the petition (Okanogan including Similkameen, Methow, and Wenatchee), there appears to be little risk of extinction of that unit as a whole. While redd counts in two of these rivers (Okanogan and Methow) have exhibited substantial declines since the late 1960s, they have been relatively stable since 1980, and counts in both the Wenatchee

and Similkameen rivers have exhibited long-term (1956-93) increasing trends. Based on Rock Island Dam adult counts, this smaller unit is certainly more abundant than it was in the 1930s and 1940s.

Special Considerations

While NMFS does not believe that this ESU is at significant risk of extinction or endangerment, the low numbers of late-run chinook salmon above Rocky Reach Dam (including the Methow and Okanogan rivers) despite the virtual elimination of in-river harvest during the summer season, are of concern. The declines since the mid 1970s in this region may indicate local problems with habitat, dam passage, or hatchery practices. Special management consideration of late-run mid-Columbia River chinook salmon may be warranted.

Some aspects of artificial propagation also pose risks for populations within the ESU. For example, large releases of fall chinook salmon have occurred in the mainstem Columbia River and in the Yakima River in recent years. The potential genetic and ecological consequences of these releases have not been adequately addressed.

The number of chinook salmon in many areas of the Columbia River Basin are at very low levels in 1994, with prospects of even lower returns in 1995. On exception was the 1994 summer chinook adult passage count at Priest Rapids Dam which reached the 10 year average count, and was similar in magnitude to the 1993 count (FPC Weekly Report #94-22). The 1994 adult return estimate for mid-Columbia River fall chinook is not yet available. While these recent adult returns numbers indicate that the population remains stable for now, the ESU should be monitored over the next few years to evaluate the effects of short-term environmental factors, as well as on-going human activities.

Determination

After a thorough analysis of all information available, NMFS has determined that the mid-Columbia River summer chinook salmon, as petitioned, do not constitute a "species" under the ESA. NMFS has determined that the mid-Columbia River summer chinook salmon is part of a large ESU that includes all late-run Columbia River chinook salmon from the mainstem Columbia River and its tributaries between Chief Joseph and McNary dams, termed mid-Columbia River summer/fall chinook salmon. NMFS has determined that at the present time this

ESU does not warrant listing as a threatened or endangered species.

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Dated: September 19, 1994.

Gary Matlock,
Program Management Officer, National
Marine Fisheries Service.

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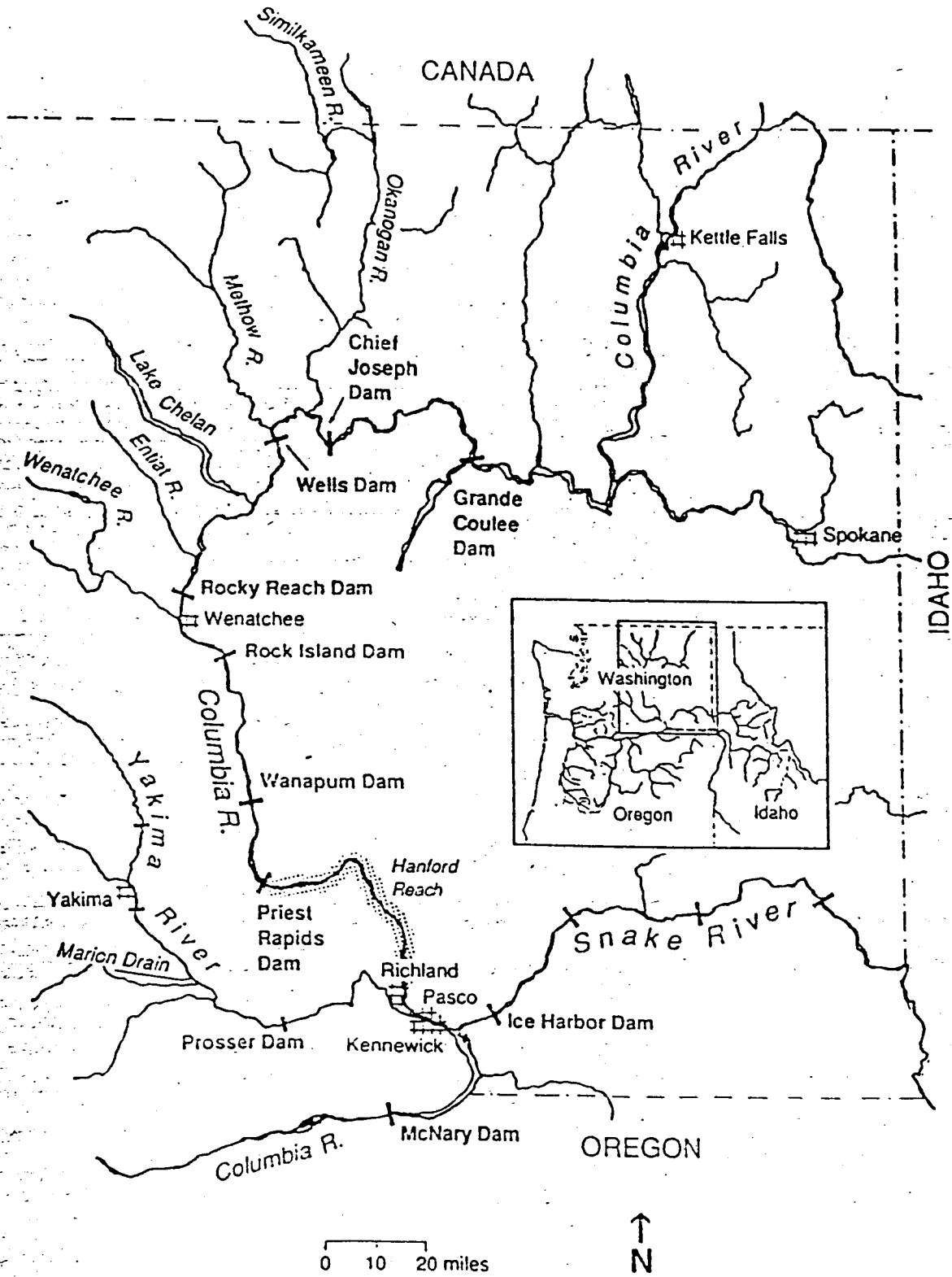


Figure 1 -- Map of mid-Columbia River, showing principal tributaries and hydroelectric facilities

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