

HCP/NCCP at a Glance

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⁴ Drafts 4-6 ; MRC layoff 2009

⁵ Resigned 2009

⁶ Resigned 2004

⁷ Resigned 2004

⁸ Drafts 4 to 8

⁹ Resigned 2003

¹⁰ Drafts 5 to 8

¹¹ Resigned 2005

¹² Resigned 2004

¹³ Resigned 2007

¹⁴ Resigned 2007

MRC Team 2011/2012

Individual commitment to a group effort—that is what makes a team work, a company work, a society work, a civilization work.

Vince Lombardi (1913-1970)

While the number of MRC employees directly working full-time on our HCP/NCCP since 2002 has been 1 and part-time 3-5, it is the work of the entire MRC team that makes the conservation measures we are proposing possible. Those who work in the field have begun implementing many of the proposed measures even before HCP/NCCP commencement and will carry that effort forward for years or decades to come. Those who work in the office provide equally essential support in the areas of administration, finance, information, and logistics. We can reach our goal only as a team. For this reason, we recognize our entire 2011/2012 team at MRC.

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¹⁵ Eric Grant was reported missing on 10/27/2010. Despite the efforts of a CHP helicopter pilot, divers, and other searchers along the coastal waters and bluffs near Albion, CA, he has not been located. This has been a tragic loss for the MRC team.

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Science Panel

The Natural Community Conservation Plan Act (NCCPA) mandates that an independent science panel analyze and review the plan prior to completion. The intent of this process is to ensure that the plan is grounded in scientifically defensible principles and methods. MRC wishes to thank the distinguished group of science advisors who reviewed the first draft of our HCP/NCCP. Subsequent to that review, the advisors conducted a workshop in May 2003 and later prepared a report that was submitted to MRC in August 2003. MRC used this report in revising our HCP/NCCP. The science advisors were

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Agency Assistance

MRC wishes to acknowledge the assistance we have received from various state and federal agencies during the development of our HCP/NCCP. Since our current document grew out of new efforts begun in spring 2002, we have cited the names of agency representatives who consistently worked with us over the long haul. In any event, we know that projects such as this one are a team effort. For every name cited, there are other dedicated individuals who have worked in the background giving advice and consultation. We appreciate all those who lent their time and expertise to this project.

The following staff from the signatory agencies provided technical and policy assistance:

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UNITED STATES FISH AND WILDLIFE SERVICE (USFWS)

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CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

COASTAL COMMISSION

OFFICE OF MINES AND RECLAMATION

¹⁶ Transferred to Caltrans in 2007

¹⁷ Formerly participated in HCP/NCCP meetings as a representative of NMFS

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Dr. Lloyd Ingles	Elicia Wise
James Irwin	Klaus Wiese

¹⁸ The Brousseau Collection at St. Mary's College of California contains over 12,500 photographs of about 2000 species of California wildflowers, fungi, trees, and other plants taken between 1925 and 1988 by Brother Alfred Brousseau F.S.C. (1908-1988). Online access is through the University of California Berkeley Digital Library Project.

¹⁹ Salmonid illustrations in Chapter 4

²⁰ Photo from Lichens of North America, Yale University Press, 1998

Reader's Guide

- GOAL OF MRC DOCUMENTATION

At its best, documentation should be easy to use, read, understand, and reference. This is often difficult to achieve in large documents dealing with complex scientific or technological issues—particularly when many voices need to be blended into one. Our task was further complicated by the fact that the audience for the HCP/NCCP ranges from scientists to corporate executives, from field technicians to the general public. While we have always attempted to make the information in the HCP/NCCP as accessible as possible, we recognize that the inherent requirement of addressing scientific, legal, and governmental issues sometimes leaves no room for *plain talk*.

- INFORMATION DESIGN AND CHUNKING

One technique for cutting through document complexity is chunking. Chunking is a process of breaking down large units of information into smaller units of information in order to improve learning and comprehension. We have chunked information in the HCP/NCCP through the use of headings, font changes, white space, color, and icons. In addition, we have selected out certain types of information, labeled them, and attached visual cues for the reader. For example, conservation measures always appear in the same type of table, with the same colors, and the same icon. Such consistent patterns increase a reader's predictive ability. When they see these cues, they know what type of information to expect.

- PHOTOGRAPHS AND ILLUSTRATIONS

While photographs are not essential to a document, we have included them to remind our readers and ourselves that an HCP and NCCP are ultimately about living animals and plants, not just about words and legalities. We have also included illustrations of some concepts and terms. Illustrations are proven tools for increasing understanding. Some of us are primarily verbal learners and others visual learners. In either case, illustration can aid in the interpretation of text and promote memory retention.

- DEFINITIONS AND GLOSSARY

Within the chapters of the HCP/NCCP, we have included certain definitions that are important to understanding the subject at hand. Professionals from several different fields have contributed to this plan and will be evaluating it—foresters, wildlife biologists, fisheries biologists, ecologists, botanists, hydrologists, and geologists. Every field has its own technical terminology. While we need to address a subject at a professional level, we also need to ensure that others outside a particular field can follow the discussion, preferably without flipping pages to a glossary. In addition to the definitions embedded in the text, however, we do have a glossary in Chapter 16 with other terms that may be unfamiliar to some readers.

- SCIENTIFIC NAMES AND ACRONYMS

In general descriptions and discussions of wildlife species, we have used common English names. For clarity, we have included scientific names in the plant species accounts (Chapter 6) since many plants have more than one common name and many common names apply to more than one plant. Finally, in government and legal circles, acronyms abound. Chapter 17 has a list of acronyms used in this document and their meanings.

- PERSONAL COMMUNICATIONS

One of the most important elements of an HCP/NCCP is documentation of the sources of information; this is how the reader can evaluate the “weight” of the evidence. Personal communications present a special challenge. MRC has made every effort to fully document our own references to conversations (face-to-face or telephone), letters, and emails; citations, either run into the text or in a footnote, including the name of the persons originating and receiving the communication, the type of communication, and the date.

Executive Summary

Start by doing what is necessary; then do what is possible; and suddenly you are doing the impossible.

Francis of Assisi (1181-1226)

After preliminary meetings with government agencies and some intermittent drafting forays in 2000-2001, MRC created a dedicated HCP/NCCP project in spring 2002. It is a project that has involved a major financial commitment, as well as the contributions of over 50 individuals, including MRC employees, environmental and botanical consultants, staff from the federal and state agencies, and science advisors. In some cases, the heart of the process was “managing chaos.” Faced with complex ecosystems, complex regulations, and complex concerns, our task was always to build on what we knew, learn what we could, and define problems in a way that allowed consensual solutions. In submitting our HCP/NCCP for review and approval, MRC believes that we have exceeded the regulatory demands. Our goal is not simply to protect the endangered species and biodiversity of our forest lands, but to enhance the conditions under which forest life survives and endures.

We have chosen to pursue both an HCP and an NCCP—a first for an industrial timberland. MRC land is a working forest. Forests are more than trees. Forests are also creeks, rivers, soils, fungi, grasses, wildflowers, songbirds, raptors, amphibians, fish, mammals, insects, and microscopic life too myriad to count or imagine. Moreover, forests are not ecological islands. Many species in a forest move back and forth between surrounding landscapes and streams, air and ocean. Any proposed conservation measures must grapple with this dynamic complexity and interaction. Partial solutions would ultimately be unworkable and unsatisfactory, both for MRC and the wildlife agencies. Moreover, we did not want to propose conservation measures under an HCP that might be countermanded, during implementation, by other government regulations. It quickly became clear that we needed to bring everyone to the same table—CDFG, USFWS, NMFS, RWQCB, CAL FIRE, and CGS, as well as other agencies that might want to review specific proposals in the HCP/NCCP related to their own regulatory authority. Then, as the proverb says of those who tackle big tasks with ambition, we “put a ladder against the sky”—and started climbing! Our climb may not have reached the

heavens but it did produce what we believe is new and higher ground for both the HCP and NCCP programs.

In the chapters that follow there are literally thousands of details, too many, in fact, to condense for an executive summary. At best, we will only touch on a few major points, starting with the goal and term of the plan. By protecting, enhancing, and creating habitat for covered species, MRC intends to contribute to their recovery and attain predictability for our management of endangered species and natural communities within our forest lands. MRC seeks an 80-year period for the HCP/NCCP. While 80 years may seem a long time for a project, it is actually the time it will take for most of our timber stands to grow to maturity. Our efforts to restore and re-grow the heavily logged land tracts that MRC purchased in July 1998 have, in a real sense, just begun. This clearly is an investment that requires time, patience, and a mind-set for the future. Many, understandably, have reservations about long-term agreements, especially one that involves a unique natural resource like the coastal redwoods. Things can change over the course of 80 years. Environmental factors can change. Advances and attitudes in science can change. Adaptive management—a critical part of the whole HCP/NCCP process—will allow us scientific scrutiny and flexibility to face these inevitable changes and steer new and better courses of action as required.

Understanding the comprehensiveness of this HCP/NCCP is very important. In total, there are 40 fish, wildlife, or plant species or sub-species directly affected by it. That, in itself, is a huge number and represents more “coverage” or proposed protection than most plans under the HCP and NCCP programs. In the MRC plan, there are 9 covered fish and wildlife species or sub-species—coho salmon, Chinook salmon, steelhead, California and northern red-legged frog, coastal tailed frog, northern spotted owl, marbled murrelet, and Point Arena mountain beaver—and 31 covered rare plants, such as Humboldt milk-vetch and coast fawn lily.

Chapters 4-6 give accounts of each of these covered species, along with the latest research from the scientific literature. The species accounts document for the 80-year plan the starting point of our knowledge. Inevitably, time will show that we and the scientific community did not always know what we thought we knew. While

some are uncomfortable with the inherent fuzziness of adaptive management, we often, as Aristotle observed almost 2400 years ago, have to learn by doing.²¹ Chapters 8 through 11 propose specific conservation measures for the covered species based on the current knowledge of MRC management and staff. Interaction with local government agencies, university researchers, consultants, and professionals in our industry have continually informed and adjusted our corporate knowledge throughout this proposal process.

Almost as extensive as the covered species list are the lands covered by our HCP/NCCP; they consist of approximately 213,244 acres. These are not contiguous acres but a virtual archipelago of forests spread out across Mendocino County. MRC hopes, in the future, to close in some of the land gaps, making the possibilities for conservation and forest management even more effective. There are provisions in the plan in the event MRC purchases additional land and explanations in Chapter 1 of how these additions will come under HCP/NCCP coverage.

In addition to individual species, the HCP/NCCP addresses natural communities within MRC land, including North Coast coniferous forest, upland broadleaved forest, closed cone forest, oak woodland, the deciduous riparian community, and the aquatic community. One way that MRC will protect these natural communities is by keeping our working forest intact. The biggest threat to natural communities in California has been urban development. Often government regulations have only managed to save pockets of these ecosystems surrounded by shopping malls and office buildings. MRC, on the other hand, is not proposing to convert any of our natural communities to other land use. Chapters 8 and 9 propose conservation measures specifically for aquatic and terrestrial habitat and for habitat elements, such as old-growth trees, snags, and rocky outcrops. These chapters discuss how MRC will mitigate any habitat loss with restoration of disturbed areas, creation of new habitat, heightened protections for critical areas, like murrelet habitat in Lower Alder Creek, and, in some cases, conservation easements. Prevention of habitat loss is a major issue that our HCP/NCCP tackles as well, with MRC proposals for recruiting LWD to streams; moderating stream temperatures; limiting or excluding

²¹ Nicomachean Ethics, Book II

heavy equipment in sensitive areas; reducing sediment delivery from mass wasting; upgrading, and in some cases, decommissioning roads and skid trails.

Accountability is essential to any plan. Simply proposing conservation measures, no matter how innovative or far-reaching, is not enough. There must also be a means of tracking whether the conservation measures produce the desired results. Chapter 13 explains how MRC will monitor the conservation measures we put in place—collecting and analyzing data to ensure that we meet, under review by the regulatory agencies, measurable targets and objectives. Chapter 15 summarizes alternatives to these MRC conservation measures that are considered in environmental impact analysis.

Finally, one of the requirements of an HCP/NCCP is to ensure that there will be adequate funding for the proposed measures. The Implementation Agreement explains what those funding commitments are. In addition, we will prepare annual budgets and reports, covering all HCP/NCCP projects, for review by the wildlife agencies.

It is clear from just this brief overview that MRC has undertaken a huge task in this HCP/NCCP. We have set high standards for ourselves, both in terms of the timber industry and in terms of ecological stewardship. However, we believe this is a task that can be done—and we are eager to begin.