

Major Duties

Plans and conducts studies and investigations concerning biological, chemical, and physical processes that affect ecology, fishery, and/or wildlife resources. Deploys data-collection systems and manipulates and analyzes data from these systems. Analyzes and resolves extremely complex technical problems for which current information is inconclusive, or is in the form of suppositions or theories regarding the effectiveness of certain treatments. Writes comprehensive reports on study findings and recommendations.

Carries out investigations of ecological, fishery and/or wildlife conservation, preservation, and propagation issues. Establishes new and modified methods, techniques, and procedures to resolve obscure and novel technical problems; formulates innovative approaches to satisfy specialized and conflicting requirements; and writes reports that detail results and conclusions.

Formulates plans for major ecology, wildlife and/or fishery projects to investigate novel biological science problems. Develops estimates of personnel, equipment, materials, and schedules required to carry out highly specialized studies. Recommends major modifications to project objectives and associated documentation in accordance with established program directives.

Conducts project analyses and reviews results of studies or investigations. Evaluates the impact of the latest technological advances in ecology, fishery, and/or wildlife resource management on novel studies conducted and on current and future programs. Writes reports that include recommendations for major changes, elimination, or improvement of operations and program plans.

FACTOR 1 - KNOWLEDGE REQUIRED BY THE POSITION (Level 1-7, 1250 points)

Professional knowledge of biology theories, concepts, and principles and a working knowledge of related disciplines in order to conduct complex biological studies and investigations.

Knowledge of specialized equipment used in biological studies to plan, conduct and modify varied and complex scientific tests and compile valid and reliable data.

Ability to analyze complex biological science data, and utilize specialized computer software in order to evaluate varied ecological conditions and diverse scientific processes.

Ability to plan and conduct complex scientific projects and write comprehensive written study reports.

FACTOR 2 - SUPERVISORY CONTROLS (Level 2-4, 450 points)

The supervisor sets the overall objectives, priorities, and deadlines. The scientist is responsible for independently planning own work, coordinating this work with other scientists, and resolving technical problems. The scientist keeps the supervisor informed of progress and unusual

conditions, adverse reactions or publicity that might arise from study findings or conclusions. The individual's analysis, recommendations, and conclusions are relied upon as being technically correct. Completed work is reviewed for adherence to overall program policies, compatibility with other work, and attainment of study objectives and deadlines.

FACTOR 3 GUIDELINES (Level 3-4, 450 points)

The guidelines are primarily bureau policies, operating program guidelines, and scientific reference literature. Precedent studies often provide procedural guides or methodology, but studies typically require that a "tailor made" approach be developed, due to differences in study objectives, the biology of a given study area, depth of investigation, or techniques available for data collection or analysis. The biologist must use resourcefulness and experienced judgment in devising new study techniques, developing methods, or significantly departing from established study practices, as required by unique local conditions. This responsibility requires substantial deviation and departure from precedent study techniques that result in more effective methods. Such methods may be used as prototypes for application by other scientists in the area and elsewhere.

FACTOR 4 COMPLEXITY (Level 4-5, 325 points)

Assignments involve varied duties requiring many different and unrelated processes applied to a broad range of activities that cover a wide geographic area, or substantial depth of analysis. The work involves identification of the boundaries of problems involved, the kinds of information needed to solve extremely complex and unusual problems encountered, and the criteria and techniques to be applied in meeting assignment objectives. The work involves solving problems concerned with novel, undeveloped, or controversial aspects of biology and related disciplines. The problems are complex due to such factors as the abstract nature of concepts and the existence of serious conflicts among scientific requirements, program directives, and administrative requirements.

FACTOR 5 SCOPE AND EFFECT (Level 5-4, 225 points)

The purpose of the work is to investigate and analyze novel and obscure biology resource problems and environmental conditions, and to develop new and improved techniques or criteria for the conduct of projects. The work affects the adequacy of state and county biology resources protection and management activities, as well as the work of program managers or technical specialists in outside agencies.

FACTORS 6 & 7, NATURE AND PURPOSE OF CONTACTS (Level 3b 110 points)

Contacts are with bureau employees and with individuals and groups outside the bureau such as biologists and managers from other agencies, contractors, or the general public.

The purpose of contacts is to coordinate work efforts, solve problems, or provide advice on non-controversial issues.

FACTOR 8 PHYSICAL DEMANDS (Level 8-2, 20 points)

The work requires some physical exertion such as walking over wet, rough, uneven, or rocky surfaces; and bending, crouching, stooping, stretching, reaching, or similar activities. The work requires moderate physical ability and average agility and dexterity.

FACTOR 9 WORK ENVIRONMENT (Level 9-2, 20 points)

Work is performed in an office, laboratory, and/or in the field. The office is adequately lighted, heated, and ventilated. Temperature and weather extremes may be encountered in the performance of the outdoor work. Field and laboratory duties may require the use of special protective gear. The incumbent is expected to conduct duties in a safe and orderly manner so as not to endanger self, fellow workers, or property with which entrusted.

TOTAL POINTS 2850

GRADE CONVERSION GS-12