

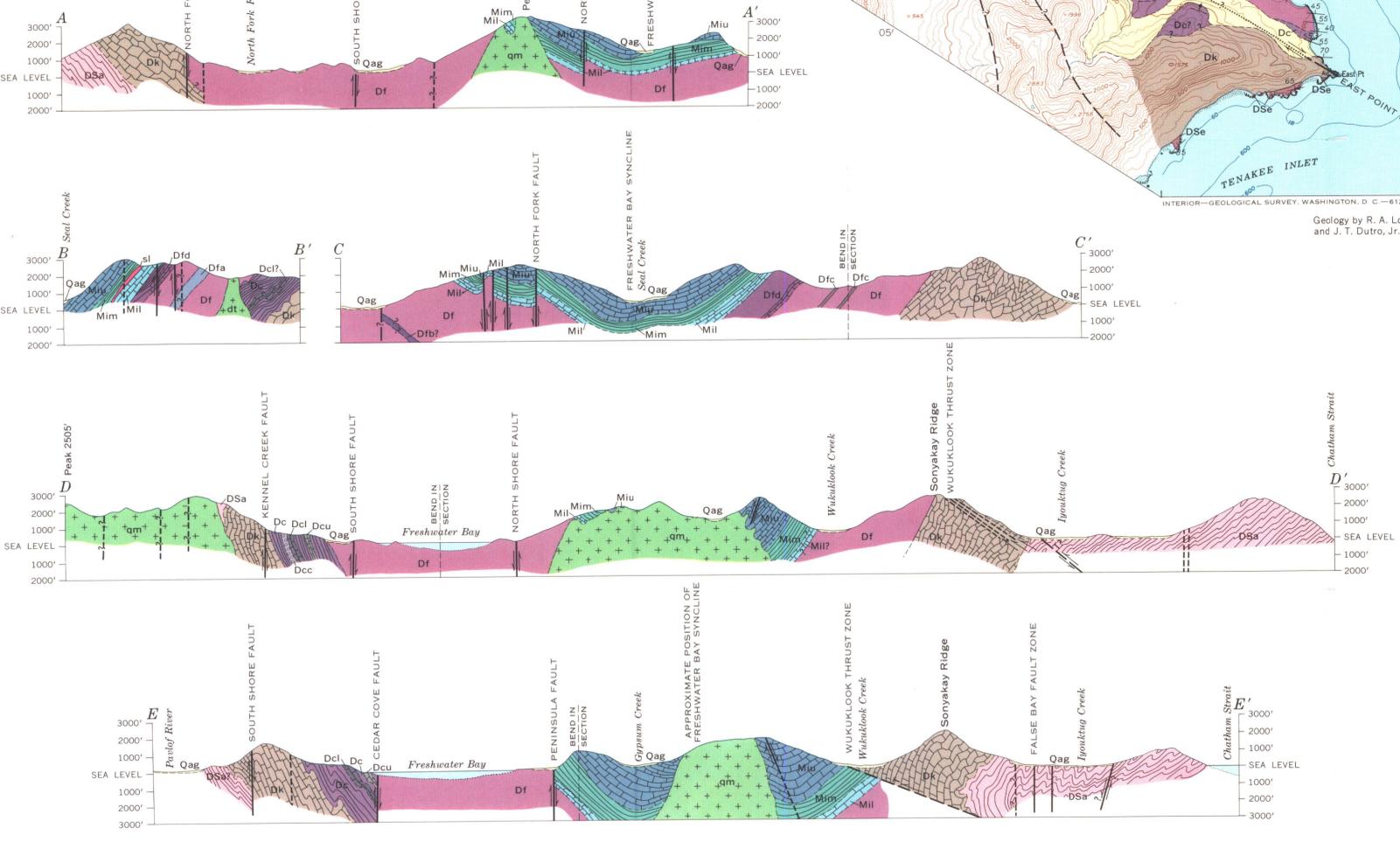
Base map from U.S. Geological Survey topographic quadrangles Sitka D-3 and D-4, Alaska, 1948

Geology by R. A. Loney, W. H. Condon, and J. T. Dutro, Jr., 1956-57

EXPLANATION

- Qag**  
Unconsolidated deposits  
Alluvial, colluvial, and valley glacial deposits undifferentiated. Gravel, sand, silt, and talus debris
- Miu**  
**Mim**  
**Mil**  
Iyaukeen formation  
Miu, upper limestone member, dominantly dark-gray, cherty, thin- to thick-bedded  
Mim, middle member, dominantly dark-gray shale, argillite, and noncalcareous to calcareous shaly limestone  
Mil, lower limestone member
- Df** **Dfd**  
**Dfa** **Dfc** **Dfb**  
Freshwater Bay formation  
Df, volcanic and sedimentary rocks, predominantly greenstone, rhyolite and andesite flows, tuffs, and breccias. Small amounts of sedimentary rocks mapped locally  
Dfd, an upper sequence of pyroclastic rocks with limestone and calcareous argillite  
Dfa, two thick argillite beds are separated by volcanic rocks  
Dfb, a thick sequence of massive indurated graywacke; probably lenticular in character  
Dfc, limestone and argillite, locally mapped
- Dc** **Dcu**  
**Dcq** **Dcl** **Dcc**  
Cedar Cove formation  
Dc, variable predominantly elastic sequence includes:  
Dcu, thick massive fossiliferous limestone  
Dcq, white quartzite occurring locally at base of Dcu  
Dcl, conglomerate and graywacke  
Dcc, volcanic rocks at base of Dcl
- Dk**  
Kennel Creek limestone  
Limestone, dark- and light-gray, thick-bedded to massive
- Dse**  
Conglomerate of East Point  
Conglomerate, indurated, in part calcareous
- Dsa**  
Argillite and graywacke  
Medium- to thin-bedded, commonly calcareous
- gr**  
Intrusive igneous rocks  
Granitic intrusive rocks of granodioritic to granitic composition (Kennel Creek area)
- am**  
Gypsum Creek quartz monzonite  
Quartz monzonite including granodiorite and marginal variants
- dt**  
Dioritic intrusive rocks, including diorite, quartz diorite, and some granodiorite and marginal variants. Minor intrusive bodies
- sl**  
Spessartite lamprophyre sill

Upper Quaternary  
Lower Mississippian, Mississippian  
Upper Devonian  
Middle and Upper(?) Devonian  
Middle Devonian  
Silurian(?) or Devonian(?)



- Contact
- Dashed where approximately located; short dashed where gradational or inferred, and indefinite boundaries of surficial deposits; queried where uncertain
- Fault
- Dashed where approximately located; short dashed where inferred; dotted where concealed; queried where uncertain. U, upthrown side; D, downthrown side. Arrows indicate relative movement; T designates upper plate of thrust fault
- Syncline
- Approximate position of axis of Freshwater Bay syncline, showing plunge
- Plunge of minor anticline
- Plunge of minor syncline
- Strike and dip of beds
- Barbed symbol indicates direction of dip and strike inferred from relatively clearly expressed criteria on aerial photographs
- Inferred or generalized strike and dip of beds
- Barbed symbol indicates generalized field data; barbed symbol indicates probable general direction of strike and dip inferred from aerial photographs
- Strike and dip of overturned beds
- Strike of vertical beds
- Horizontal beds
- Generalized strike and dip of crumpled, plicated, creculated or undulating beds

GEOLOGIC MAP AND SECTIONS OF THE FRESHWATER BAY AREA, CHICHAGOF ISLAND, ALASKA

